

2021 **MISSOURI NURSING** WORKFORCE REPORT



MISSOURI
State Board of Nursing

2021 Missouri Nursing Workforce Report

By the University of Missouri Center for Health Policy¹,
Office of Health, Outreach, Policy, and Education², and
Missouri State Board of Nursing³

*Bridget Murphy, MA¹; Jill Lucht, MS¹; Eric McDavid, BS¹; Morgan Self, MA¹;
Parvina Yakubova, MS¹; Tracy Greever-Rice, PhD¹; Kathleen Quinn, PhD²;
Lori Scheidt, MBA-HCM³*

Suggested Citation:

Missouri State Board of Nursing. (2021). *2021 Missouri Nursing Workforce Report*.
Jefferson City, MO: Missouri State Board of Nursing.

Table of Contents

Executive Summary.....	4
Highlights from the Data	4
Figure 1. Reference Map – Missouri Core Based Statistical Areas	8
Introduction.....	9
Nursing in Missouri.....	9
Summary of Methods.....	10
Survey Distribution and Response	11
Figure 2. Number of Nurses by License Type Across Missouri Datasets	11
Figure 3. APRN Certifications Across Missouri Datasets.....	12
Figure 4. Distribution of Ages for LPNs, RNs, and APRNs Across Missouri Datasets..	13
Figure 5. Gender of Nurses Across Missouri Datasets.....	14
Figure 6. Employment Status of LPNs, RNs, and APRNs Licensed in Missouri	15
Figure 7. Employment Status of Respondents Not Employed in Nursing.....	15
Figure 8. Reason for Unemployment	16
Figure 9. County of Residence for Unemployed Nurses Looking for Work as a Nurse ..	17
Characteristics of the Nursing Workforce.....	18
Geographic Distribution.....	18
Employment and Residence of Nurses within Missouri.....	18
Figure 10. County of Employment of Nurses Employed in Missouri.....	19
Figure 11. County of Residence of Nurses Living in Missouri	20
Distribution across Metropolitan, Micropolitan, and Rural Counties.....	21

1 | Pursuant to section 324.001.14(4), RSMo, all licensee/registrant data or records provided by the State Board of Nursing shall be deemed the property of the State Board of Nursing. Accordingly, this report and all data contained herein is the property of the State Board of Nursing and shall not be used without the express written permission of the State Board of Nursing.

Figure 12. Employment of LPNs, RNs and APRNs in Metropolitan, Micropolitan, or Rural Counties.....	21
Figure 13. Residence of LPNs, RNs and APRNs in Metropolitan, Micropolitan, or Rural Counties.....	22
Employment ZIP Code for Nurses Living in Missouri.....	23
Figure 14. Employment ZIP Code of All LPNs Licensed in Missouri	23
Figure 15. Employment Zip Code of All RNs Residing in Missouri	24
Figure 16. Employment Zip Code of All APRNs Residing in Missouri	25
Age Distribution	26
Figure 17. Distribution of Ages for LPNs Licensed in Missouri	26
Figure 18. Distribution of Ages for RNs Licensed in Missouri.....	26
Figure 19. Distribution of Ages for APRNs Licensed in Missouri.....	27
Figure 20. Distribution of Ages by APRN Certifications.....	27
Figure 21. Percent of Nurses 55 Years and Older by County of Employment.....	28
Figure 22. Percentage of LPNs, RNs, and APRNs Age 55 and Older by Employment Setting.....	29
Figure 23. Gender of LPNs, RNs, APRNs Licensed in Missouri.....	30
Figure 24. Gender of Missouri-Licensed Nurses Across Age Brackets	30
Figure 25. Percent Male Nurses by County of Employment.....	31
Race and Ethnicity.....	32
Figure 26. Race of LPNs, RNs, APRNs in Missouri	32
Figure 27. Race of LPNs, RNs, APRNs in Missouri included in “All Other Races” Category.....	33
Figure 28. Ethnicity of LPNs, RNs, APRNs Licensed in Missouri.....	33
Education.....	34
Figure 29. Highest Level of Nursing Education of LPNs	34
Figure 30. Highest Level of Nursing Education of RNs	35
Figure 31. Initial Education for Missouri-Licensed RNs by Year (2002-2021).....	35
Figure 32. Highest Level of Nursing Education of APRNs	36
Employment Position Description.....	36
Figure 33. Number of Positions Currently Held by LPNs, RNs, and APRNs.....	36
Figure 34. Position Description of LPNs, RNs, and APRNs.....	37
Figure 35. Primary Position Description of LPNs	38
Figure 36. Primary Position Description of RNs	38

Figure 37. Primary Position Description of APRNs	39
Figure 38. LPNs, RNs, and APRNs Average Hours Per Week Working as a Nurse.....	39
Employment Setting	40
Figure 39. Percentage of LPNs, RNs, APRNs in Each Employment Setting	40
Figure 40. Number of LPNs in Each Employment Setting.....	41
Figure 41. Number of RNs in Each Employment Setting	42
Figure 42. Number of APRNs in Each Employment Setting	43
Employment Specialty.....	43
Figure 43. Employment Specialty of LPNs, RNs, APRNs That Most Closely Corresponds to Their Primary Nursing Position.....	44
Figure 44. Employment Specialty of LPNs That Most Closely Corresponds to Their Primary Nursing Position	45
Figure 45. Employment Specialty of RNs That Most Closely Corresponds to Their Primary Nursing Position	46
Figure 46. Employment Specialty of APRNs That Most Closely Corresponds to Their Primary Nursing Position	47
Next Steps.....	48
Appendix.....	49
Appendix 1: Nurses with Active Missouri License without Nursys® Enrollment	49
Figure 47. Initial License Year of Nurses with Active Missouri License without Nursys® Enrollment.....	49
Figure 48. Age of Nurses with Active Missouri License without Nursys® Enrollment ..	50
Figure 49. License Type of Nurses with Active Missouri License without Nursys® Enrollment.....	51
Figure 50. Gender of Nurses with Active Missouri License without Nursys® Enrollment	51
Figure 51. Geography of Nurses with Active Missouri License without Nursys® Enrollment.....	52
Appendix 2: Number and Rate of Nurses by County of Employment.....	53
Appendix 3: Number and Rate of Nurses by County of Residence	57
Appendix 4: Nursys® Renewal Application MDS Nurse Supply Workforce Survey	61

Executive Summary

The following report describes the nursing workforce in Missouri, based on data provided by the Missouri State Board of Nursing Professional Registration and Nursys.^{®1}

- Professional Registration includes all nurses licensed in Missouri as of October 2021 (n=137,640).
- Nursys[®] includes more comprehensive data on nurses who enrolled in the Nursys[®] system between January 2019 and October 2021 (n=147,230).
- Nursys[®] data were matched with Professional Registration data to create the Merged dataset used throughout this report (n=132,520).

More information on Professional Registration, Nursys[®] and Merged datasets is available in the Summary of Methods section of this report.

Pursuant to section 324.001.14(4), RSMo, all licensee/registrant data or records provided by the State Board of Nursing shall be deemed the property of the State Board of Nursing. Accordingly, this report and all data contained herein is the property of the State Board of Nursing and shall not be used without the express written permission of the State Board of Nursing.

Highlights from the Data

Employment Status of Missouri-Licensed Nurses

- The nursing workforce includes all Missouri-licensed nurses who are employed, volunteering, or unemployed but looking for work as a nurse. The vast majority of nurses in the workforce are actively employed full-time in nursing or a position that requires a nursing license (Figure 6). This includes:
 - 80.0% or 14,569 LPNs,
 - 80.3% or 70,071 RNs, and
 - 80.8% or 9,637 APRNs.
- The most common license type² among Missouri nurses is Registered Nurse (RN) with 73.9%, followed by Licensed Practical Nurse (LPN) with 16.6% and Advanced Practice Registered Nurse (APRN) with 9.5% (Figure 2).
- Within the nursing workforce, very few RNs and APRNs report that they are unemployed and looking for work as a nurse (3.7% of RNs and 2.2% APRNs), indicating that there is a limited supply of RNs and APRNs within the state available to meet the current need. A higher percentage of LPNs, 7.1%, report being unemployed and looking for work as a nurse.
- Reasons for unemployment vary across license types. Unemployed LPNs and RNs most commonly attribute their status to home and family obligations, including 46.2% of LPNs and 53% of RNs. For 41% of APRNs, the reason selected for unemployment was school obligations (Figure 8).

¹ Nursys[®] is a Registered Trademark of the National Council of State Boards of Nursing.

² Only Licensed Practical Nurses and Registered Nurses are licensed. An Advanced Practice Registered Nurse (APRN) holds a RN license and then is recognized as an APRN based on national advanced practice certification (<https://www.nursinglicensure.org/np-state/missouri-nurse-practitioner/>). For purposes of this report, license type is defined as the actual license for LPNs and RNs and certification for APRNs.

Geographic Distribution

- The State of Missouri has a rate of 153 nurses employed per 10,000 residents, including 25 LPNs, 113 RNs and 15 APRNs per 10,000 residents (Figure 10).
- The distribution of nurses across the state reflects population density patterns and the location of regional medical trade centers. Hence, both the number and the rate of nurses in rural areas are low compared to metropolitan and micropolitan counties.
 - The rate of nurses per 10,000 residents working in rural Missouri counties is just 78, compared to 129 in micropolitan counties and 170 in metropolitan counties.
 - The predominance of metropolitan-employed nurses is especially true for RNs and APRNs, with approximately 86% of nurses in each of these groups working in metropolitan counties and only 5.3% employed in rural counties.
 - LPNs have higher representations in micropolitan (17.4%) and rural (13.6%) counties than RNs and APRNs (Figure 12). This is partially due to the number of nursing homes, extended care or assisted living facilities in rural counties, where over one-third of LPNs are employed.

Age Distribution

- In general, the nursing workforce is evenly distributed across age cohorts. Among the three license types there are some notable differences in the youngest and oldest cohorts:
 - Only 2.3% of LPNs fall into the 18–24-year-old cohort, and 8.8% of LPNs are 65 or older (Figure 17).
 - Although 8.8% of RNs are of retirement age (over 65), about half are under 45, with 3.4% in the 18-24 cohort (Figure 18).
 - There are no APRNs under the age of 25 licensed in Missouri, likely due to the higher levels of education required. Missouri-licensed APRNs are less likely than LPNs and RNs to be 65 or older (Figure 19).
- Of concern are the relatively high rates of nurses nearing retirement (aged 55 and older) in some employment settings and counties in the state. See Figure 21 for more information.

Gender Distribution

- Nursing continues to be a female-dominated profession: 93.9% of LPNs, 90.9% of RNs and 87.2% of APRNs are women (Figure 23).
- The gender distribution of nurses is consistent across age groups. In fact, the youngest (18-24) and oldest (65 or older) age groups have equal percentages of female and male nurses (Figure 24).

Race and Ethnicity

- In terms of race and ethnicity, the data indicate that Missouri's nursing workforce is not as diverse as the general population.
 - The majority of Missouri nurses in all license types are White Alone, including 80.0% of LPNs, 88.4% of RNs and 89.2% of APRNs (Figure 27).
 - According to the 2020 US Census, 12.4% of Missourians are Black or African American Alone.
 - Black or African American nurses are underrepresented among RNs and APRNs, which have 6.3% and 6.0% reporting their race as Black or African American Alone.
 - LPNs have a higher Black or African American population than the general Missouri population at 16.1%.
 - A small percentage of Missouri nurses are Hispanic or Latinx, including 2.0% LPNs, 2.3% RNs and 2.0% APRNs, while 4.9% of Missourians are Hispanic or Latinx, according to the US Census (Figure 28).

Education

- Many nurses hold multiple degrees, both in nursing and other fields. In terms of highest level of nursing education (Figure 30):
 - Most LPNs have a Vocational or Practical Nursing Certificate (95.3%),
 - Over half of RNs have a Bachelor of Science Degree in Nursing (53.8%), and
 - Most APRNs have a Master of Science Degree in Nursing (81.5%).

Employment Position Description

- While most nurses in all license types work in one nursing position, including 87.6% LPNs, 90.8% RNs and 82.3% APRNs, a sizeable number of nurses have more than one position, including 12.4% of LPNs, 9.2% of RNs and 17.8% of APRNs (Figure 23).
- Except for Advanced Practice Registered Nurses, the majority of nurses in each position description, or job title, are RNs (Figure 34).
- About three-quarters of LPNs (77.9%) and RNs (72.1%) hold the position of staff nurse (Figures 35 and 36). Most APRNs (73.3%) hold the position of Advanced Practice Registered Nurse (Figure 37).
- A sizeable portion of nurses in all license types work more than the typical 36-40 hours per week considered full-time for most nurses, including 20.2% of LPNs, 15.6% of RNs and 23.0% of APRNs (Figure 38).

Employment Setting

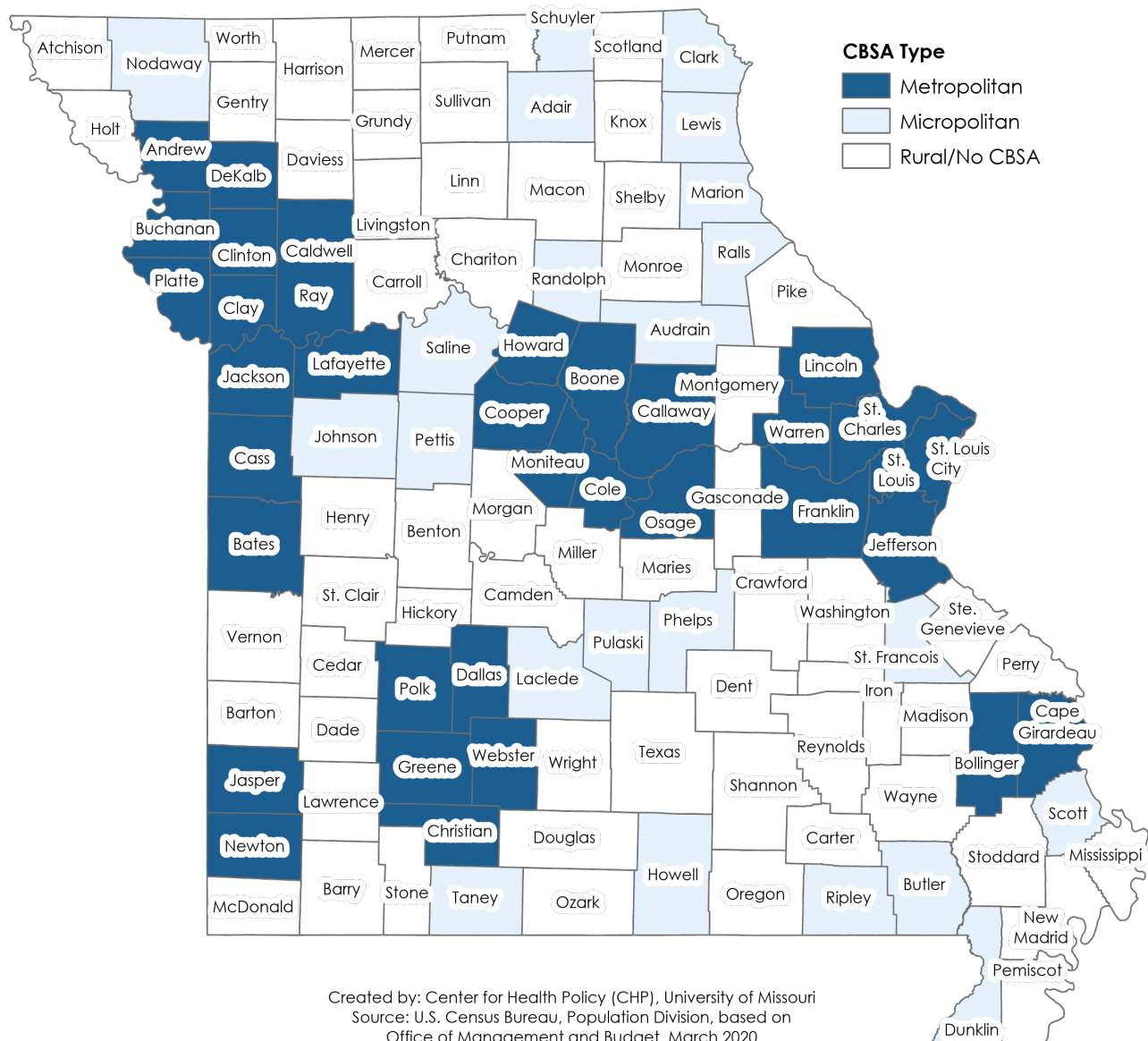
- RNs comprise the largest group of nurses in all employment settings, except the category which includes nursing homes, extended care and assisted living facilities where LPNs comprise the majority of the workforce (Figure 39).
- Within each license type, employment settings vary in the following ways:
 - LPNs are most often working in nursing homes, extended care or assisted living facilities, where over one-third of LPNs (38.6%) are employed (Figure 40).
 - Over half of RNs (60.4%) work in hospitals (Figure 41).
 - Just under half of APRNs (48.0%) work in hospitals. Another important employment setting for APRNs is ambulatory care, including physician's offices or primary care facilities, with 18.7% (Figure 42).

Employment Specialty

- Employment specialties also vary by license type:
 - Over one-third (35.5%) of LPNs specialize in geriatrics or gerontology (Figure 44).
 - RN areas of specialty are quite dispersed, with the most common being acute/critical care (14.8%) and medical surgery (11.6%) (Figure 45).
 - Over 40% of APRNs fall into one of three specialties, adult health, family health or primary care (16.7%); anesthesia (15.7%); or acute care or critical care (10.9%) (Figure 46).

Figure 1. Reference Map – Missouri Core Based Statistical Areas

Core-based statistical areas (CBSAs) are geographic areas defined by the U.S. Office of Management and Budget (OMB) as one or more counties (or county-equivalents like the City of St. Louis) anchored by an urban center plus the counties that are socioeconomically tied to the urban center by commuting. Metropolitan areas, shown with the darkest blue on the reference map, have an urban center with more than 50,000 residents. Micropolitan areas have an urban center between 10,000-50,000 residents and are designated with medium blue shading on the reference map. For the purposes of this report, counties without a CBSA are defined as rural, and have the lightest blue shading on the map.



Introduction

The Missouri Health Care Workforce Project, housed at the University of Missouri (MU) Center for Health Policy, conducts analyses of Missouri's health care workforce to support policymakers in health care, government, and education programs, with the goal of improving access and quality of health services for all Missourians. Appropriate planning and assessment of health professional needs are dependent upon the availability of accurate, timely, and reliable data. The Missouri Health Care Workforce Project serves as a data warehouse and analytic clearinghouse, providing stakeholders the information necessary to address the shortages and maldistribution of health care professionals, and is used for planning by policy makers, health systems, researchers, and higher education institutions to determine supply and demand of health professionals statewide.

The goals of the Missouri Health Care Workforce Project are to:

- Monitor longitudinal trends in supply and distribution of health care professionals,
- Inform health care workforce policy makers and advocacy organizations,
- Inform education programs that impact the quantity and distribution of health care professionals, and
- Identify emerging health care workforce issues.

The following report explores the workforce patterns of Missouri's nurses. Specifically, the goal is to better understand the demographic makeup and geographic distribution of nurses, their educational backgrounds, specializations, and the populations that they serve.

Nursing in Missouri

The Missouri State Board of Nursing offers two license types: Licensed Practical Nurse (LPN) and Registered Nurse (RN). RNs who complete additional education and training to obtain national certification and recognition from the Missouri State Board of Nursing may practice as Advanced Practice Registered Nurses (APRNs) in Missouri.

Each nursing license type is defined by Missouri statute section 335.016, RSMo.

Licensed Practical Nurses (LPNs) provide care under the direction of a Registered Nurse (RN), or someone licensed to prescribe medications and treatments such as a physician. LPNs comprise the majority of the nursing workforce in Missouri's long-term care facilities such as nursing homes.

Registered Nurses (RNs), also known as registered professional nurses, provide patient education, assessment, administration of medications and treatments, care coordination, and teaching. RNs most often practice in a hospital setting.

Advanced Practice Registered Nurses (APRNs) have completed advanced nursing education and are certified by a nationally recognized professional organization as a Certified Nurse Midwife (CNM), Certified Nurse Practitioner (CNP), Clinical Nurse Specialist (CNS), or Certified Registered Nurse Anesthetist (CRNA). APRNs may hold more than one certification. Like RNs, APRNs most often practice in hospitals. However, CNPs are an important source of primary care as well, and often practice in outpatient clinics.

Summary of Methods

This report is the result of extensive collaboration between the Missouri State Board of Nursing and the Center for Health Policy (CHP) and the Office of Health, Outreach, Policy, and Education (HOPE) at the University of Missouri-Columbia.

The data in the report are from two sources: Missouri Division of Professional Registration State Board of Nursing and Nursys®. The Missouri Division of Professional Registration State Board of Nursing data set is called “Professional Registration” throughout the report.

Professional Registration includes all nurses with a non-expired license in Missouri in 2021. The Missouri State Board of Nursing provided a raw Professional Registration file with 150,925 entries to the University of Missouri team, including 13,285 duplicate entries. Duplicates typically occur when nurses advance to a new license type. For example, a nurse may have an original entry as a registered nurse, and another entry for advanced practice after completing additional education. The duplicate entry with the highest license type or certification is retained, and the remaining duplicate entries are removed from the dataset, resulting in 137,640 unique nurses in the Professional Registration dataset.

The Nursys® dataset is a repository of license and disciplinary data maintained by the not-for-profit National Council of State Boards of Nursing (NCSBN). The Missouri State Board of Nursing is a member of NCSBN. Nursys.com and the Nursys® e-Notify service are maintained by NCSBN with the participation of boards of nursing in order to support the mission and work of individual boards of nursing. Pursuant to the Nursys® e-Notify terms of use, the National Council of State Boards of Nursing (NCSBN) does not sell information. Workforce related information provided in the repository is used for the purposes of nursing workforce research. Appendix 4 includes a copy of the Minimum Dataset Survey used to collect workforce information during the renewal process.

The Missouri State Board of Nursing sends license and discipline records to Nursys®. Nurses may then enroll in Nursys e-Notify® and provide workforce information during their renewal period. New licensees and those who renew their licenses with a paper form do not have data in Nursys®. Appendix 1 includes an analysis of this population.

The workforce information collected in Nursys® includes education, employment location, setting, and employment status. Data in this report include nurses with an active Missouri license on October 1, 2021, and who enrolled in the Nursys® e-Notify system between January 2019 and October 2021 (n=132,527).

Survey Distribution and Response

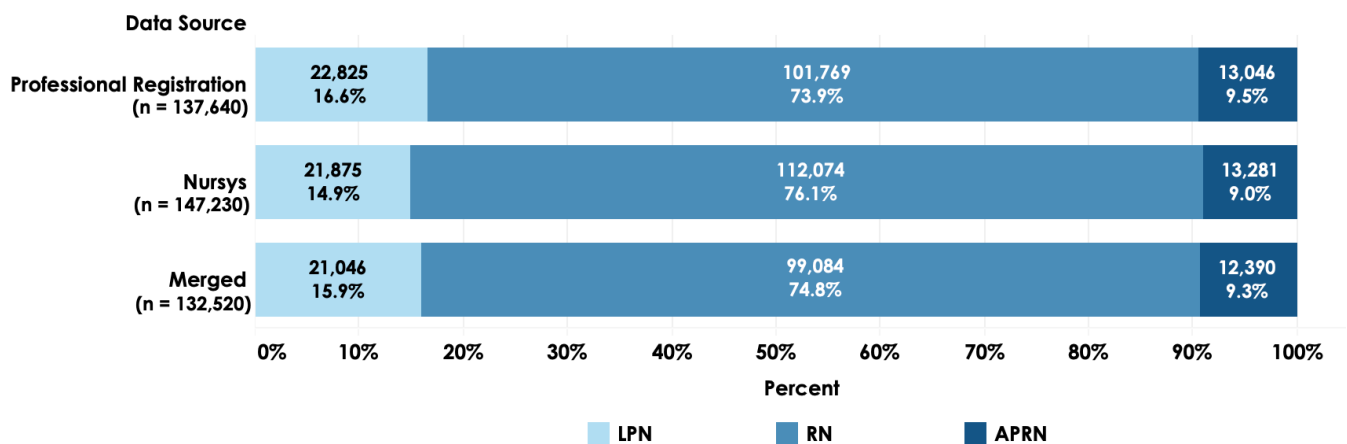
The Missouri State Board of Nursing required enrollment in the Nursys® e-Notify service during the 2019 license renewal period for registered nurses (RNs) and the 2020 license renewal period for licensed practical nurses (LPNs). As a result, nearly all nurses licensed in Missouri (96.3%) are included in the Nursys® dataset.

For the purposes of this report, nurses in Professional Registration are matched with those enrolled in Nursys® e-Notify by license number, license type, and birth year. Once matched, data from both sources are combined into the Merged dataset.

The charts below compare Professional Registration, Nursys® and Merged datasets on license type, age, and gender to demonstrate the representativeness of the Merged dataset.

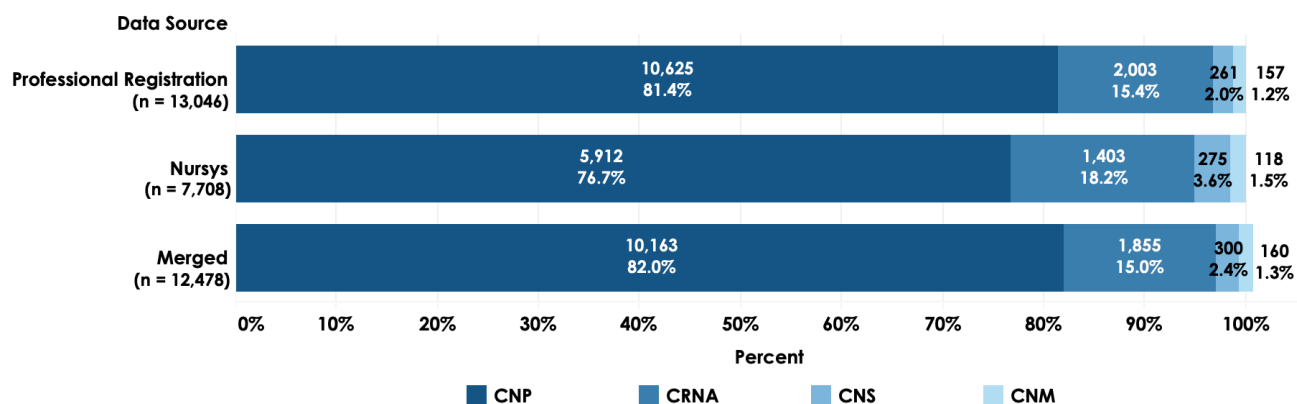
The proportion of LPNs, RNs, and APRNs is very similar across the three datasets. RN is the most common license type, representing about three-quarters of nurses in Missouri (Figure 2).

Figure 2. Number of Nurses by License Type Across Missouri Datasets



APRNs have four certifications³: Certified Nurse Midwife (CNM), Certified Nurse Practitioner (CNP), Clinical Nurse Specialist (CNS) and Certified Registered Nurse Anesthetist (CRNA). Within Professional Registration, each APRN nurse has one associated certification, whereas within the Nursys® system, APRN nurses can indicate more than one certification. Although Nursys® allows for multiple APRN certifications, 42% of APRN nurses did not input certification information. To account for missing data within Nursys®, the Merged dataset utilizes APRN certification from Professional Registration for APRNs who did not provide certification information in Nursys®. Despite the differences in data collection, the distribution of license types is consistent across the three data sets, with Certified Nurse Practitioners representing approximately 77-82% of APRNs in all three cases (Figure 3).

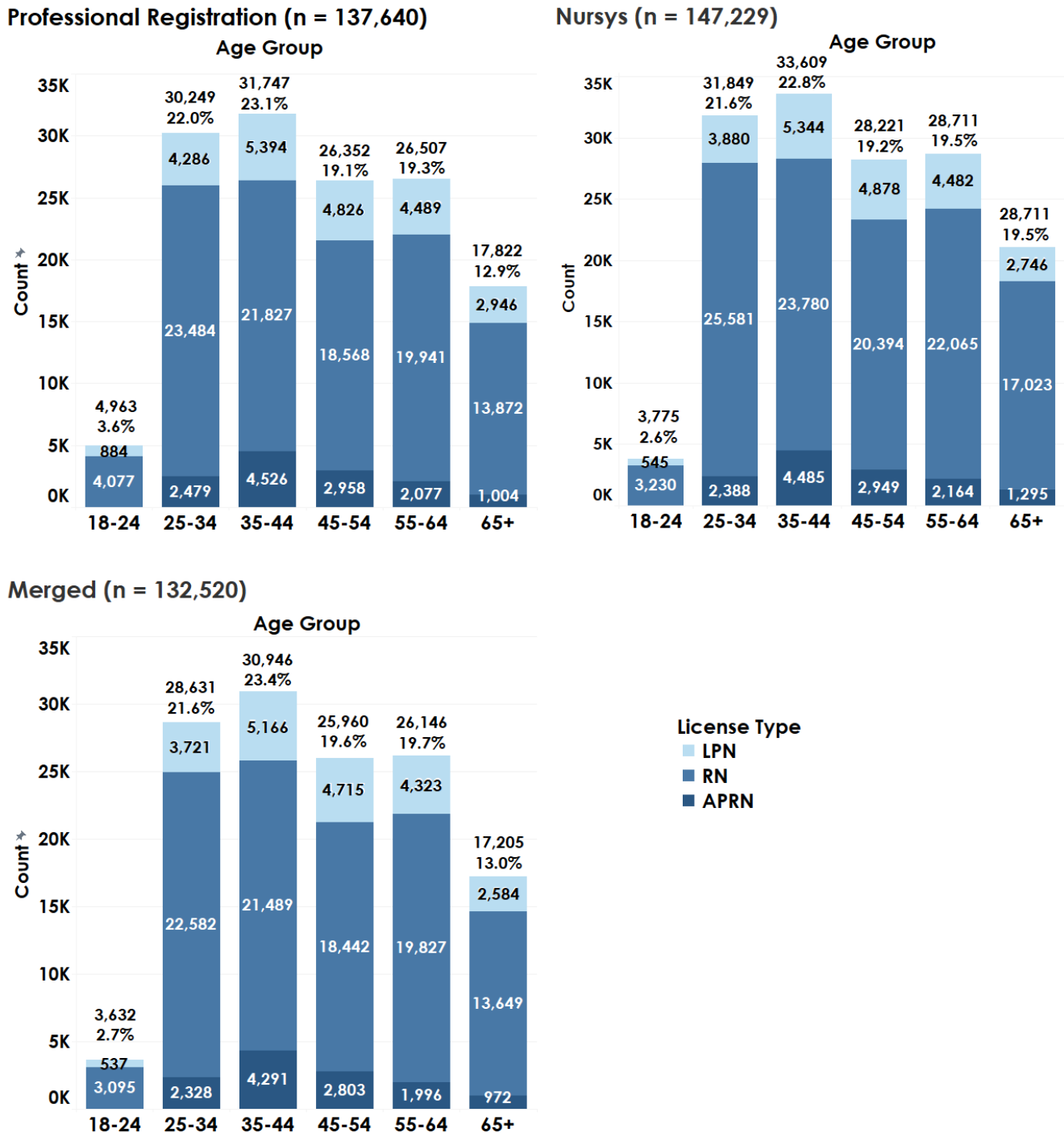
Figure 3. APRN Certifications Across Missouri Datasets



³ APRN Consensus Work Group & National Council of State Boards of Nursing APRN Advisory Committee. (2008). *Consensus Model for APRN Regulation: Licensure, Accreditation, Certification & Education*. National Council of State Boards.

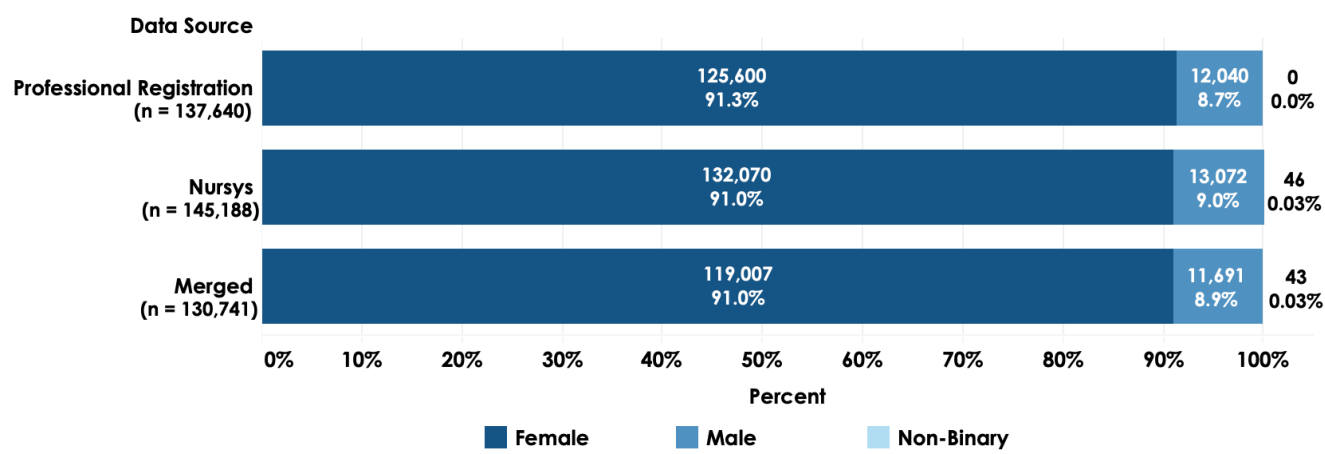
The age distribution for the Professional Registration, Nursys® and Merged datasets are closely parallel, except for the youngest age bracket. The slightly higher percentage of nurses aged 18-24 in Professional Registration is likely attributable to newly licensed nurses who have not yet gone through renewal and, therefore, are not included in Nursys® (Figure 4). See Appendix 1 for more information on this group of nurses.

Figure 4. Distribution of Ages for LPNs, RNs, and APRNs Across Missouri Datasets



Gender questions are asked differently by Professional Registration (PR) and Nursys®. In PR, licensees declare either female or male. In Nursys®, respondents are also able to identify as non-binary, which is the gender identity of 46 nurses in Nursys® and 43 nurses in the Merged dataset. Across all three Missouri datasets, 91% of nurses identify as female (Figure 5).

Figure 5. Gender of Nurses Across Missouri Datasets

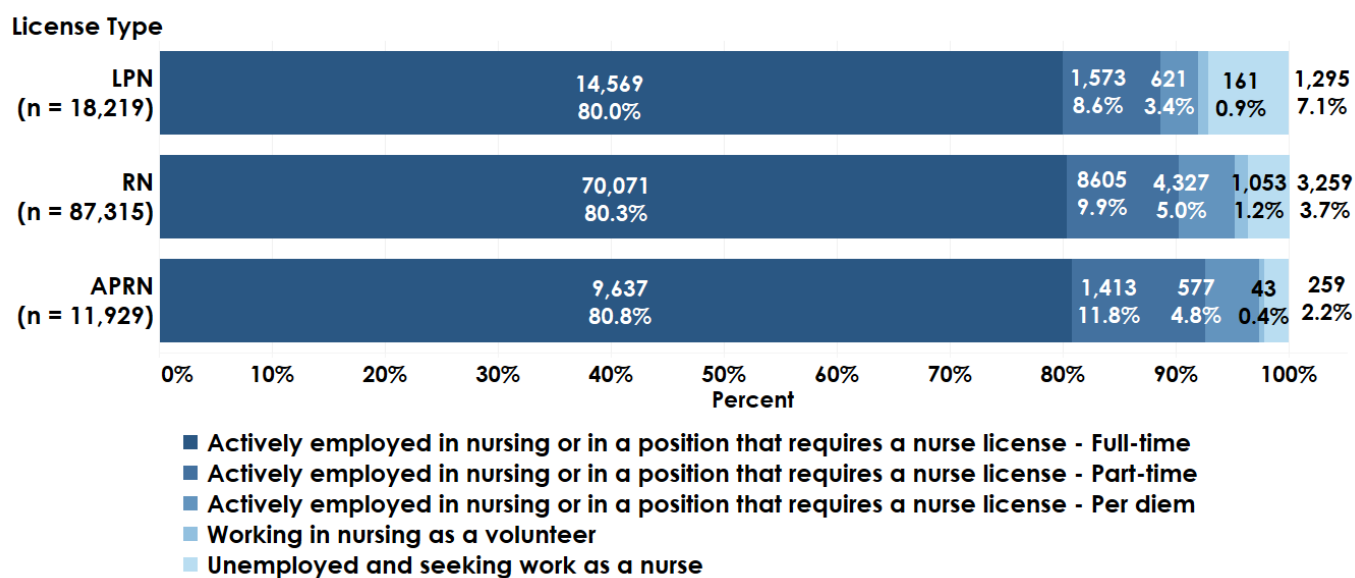


With 96% of licensed nurses included in the Merged dataset, as well as close similarities in license type, age and gender, the Merged dataset is an accurate representation of Missouri’s nurses, providing the most comprehensive data on Missouri’s nursing workforce available. This report draws on the Merged dataset to explore the characteristics and work patterns of nurses who are licensed in Missouri.

Employment Status of Missouri-Licensed Nurses

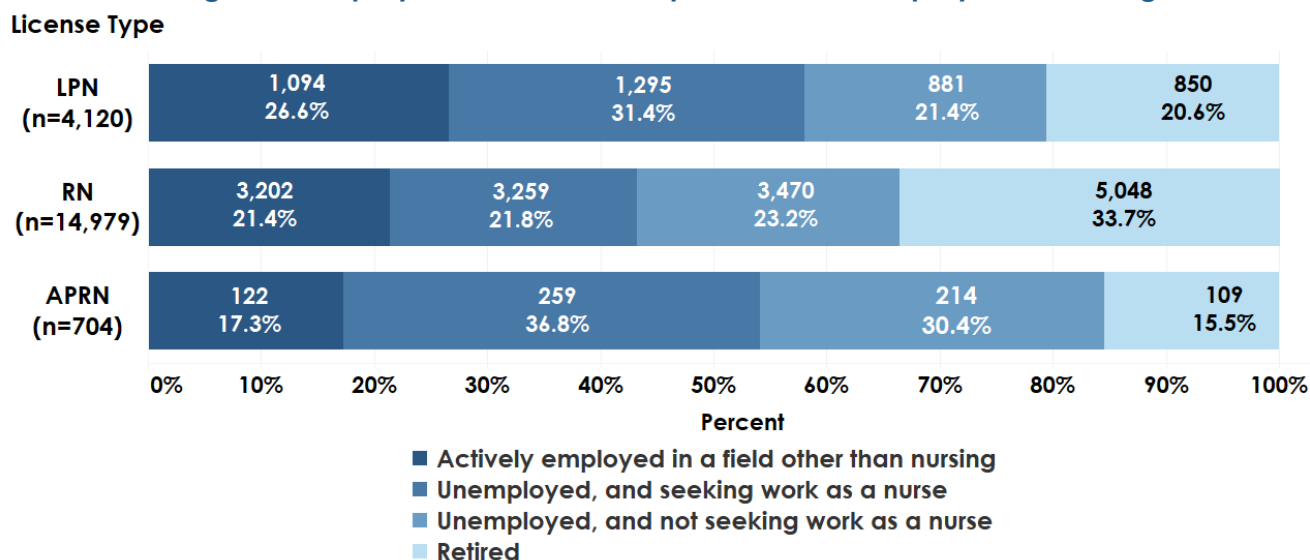
The nursing workforce includes all Missouri-licensed nurses who are employed, volunteering, or unemployed but looking for work as a nurse. This accounts for approximately 89% of nurses in the Merged dataset. Among this group, most nurses licensed in Missouri are actively employed full-time in nursing or a position that requires a nursing license, including approximately 80% of LPNs, RNs, and APRNs. There are very few RNs and APRNs who report that they are unemployed and looking for work as a nurse (3.7% of RNs and 2.2% of APRNs), indicating that there is a limited supply of RNs and APRNs within the state available to meet the current need. A higher percentage of LPNs (7.1%), report being unemployed and looking for work as a nurse (Figure 6).

Figure 6. Employment Status of LPNs, RNs, and APRNs Licensed in Missouri



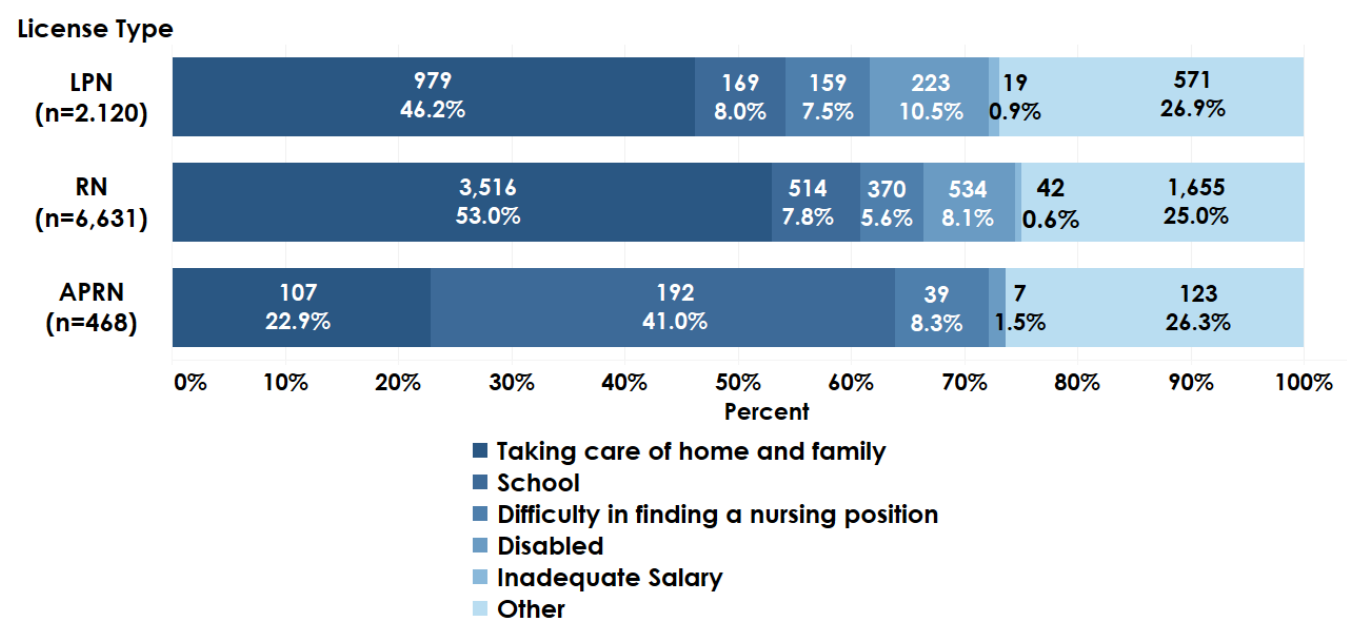
Less than 20% of nurses licensed in Missouri are currently neither employed nor volunteering in nursing, including 19.6% of LPNs, 15% of RNs, and 5.7% of APRNs. The employment status for these nurses varies across license type. LPNs and APRNs who are not working in nursing are most commonly unemployed and seeking work as nurses, and RNs who are not working in nursing are most commonly retired. Across license types, LPNs who are not working in nursing are most likely to be actively working in another field, and APRNs who are not working in nursing are most likely to be unemployed and seeking work outside of nursing (Figure 7).

Figure 7. Employment Status of Respondents Not Employed in Nursing



Nurses who reported being unemployed (N=9,378) were asked to report their reason for unemployment. Unemployed LPNs and RNs most commonly attributed their status to home and family obligations, including 46.2% of LPNs and 53% of RNs. For 41% of APRNs, the reason selected for unemployment was school obligations. LPNs were the most likely license type to attribute their unemployment to a disability. While about 8% of unemployed nurses across all license types selected difficulty in finding a nursing position, about 25% of nurses selected “other,” further emphasizing the multifaceted reasons for unemployment beyond the job market (Figure 8).

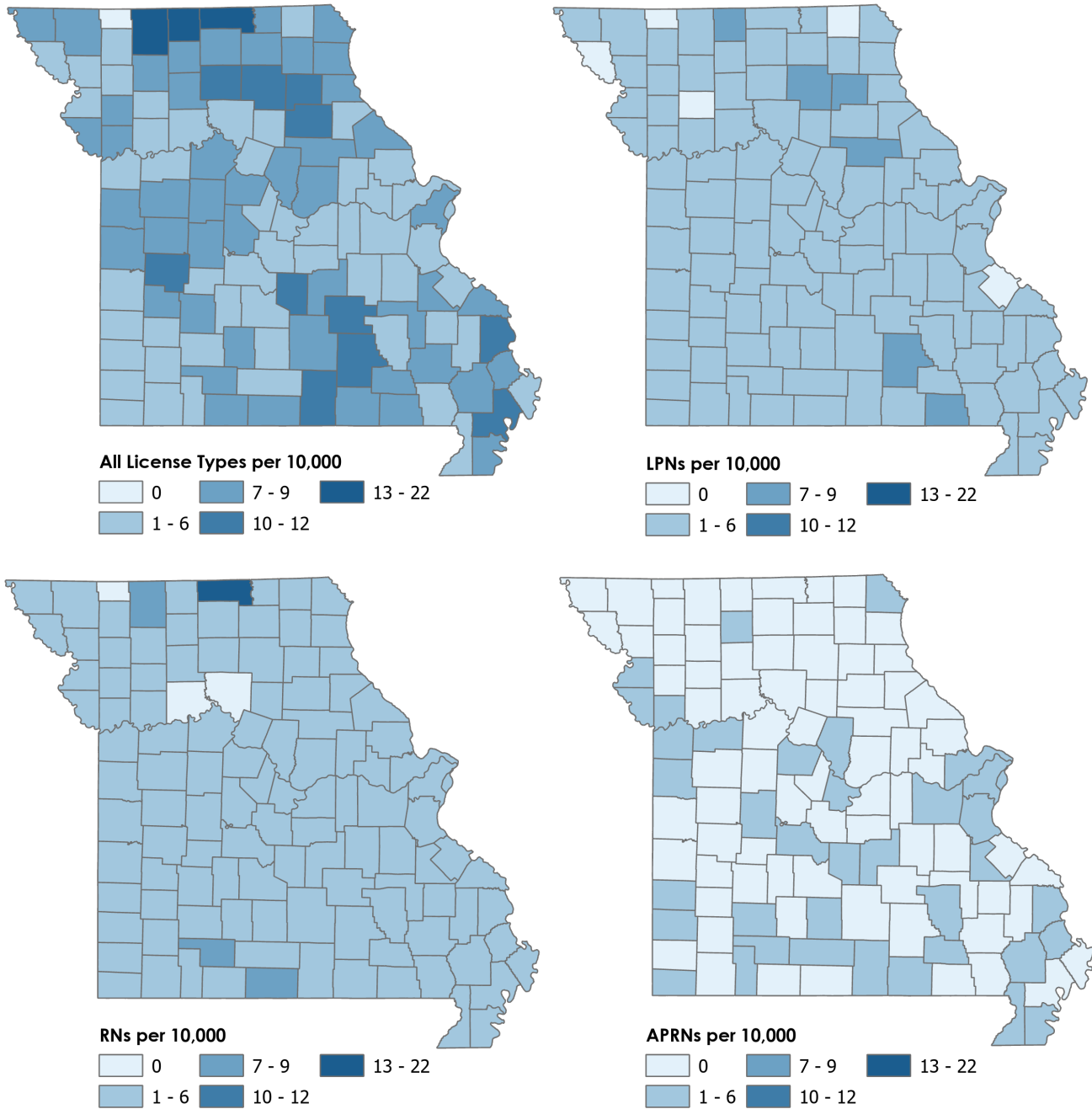
Figure 8. Reason for Unemployment



The map in Figure 9 indicates the county of residence for nurses who report being unemployed and looking for work as a nurse. The shading is based on the number of unemployed nurses looking for work in nursing per 10,000 people.

Apart from Worth County, every county in Missouri has at least one unemployed nurse looking for work in nursing. Six counties have 7-9 unemployed LPNs looking for nursing employment per 10,000 people; four counties have 7 or more unemployed RNs looking for nursing employment, including Putnam County which has 15 unemployed RNs looking for nursing employment per 10,000 people. Across the state, there are 77 counties that have zero APRNs who are unemployed and looking for work in nursing. Likewise, no county in Missouri has more than two unemployed APRNs looking for work in nursing per 10,000 people.

Figure 9. County of Residence for Unemployed Nurses Looking for Work as a Nurse



Created by: Center for Health Policy, University of Missouri
Source: Nursys, 1/1/2019-10/01/2021

Characteristics of the Nursing Workforce

To explore characteristics of the nursing workforce, the remaining analysis includes data from all Missouri-licensed nurse respondents who reported being actively employed in nursing or in a position that requires a nursing degree (full-time, part-time, per diem, or as a volunteer) (n=105,545).

Geographic Distribution

Like most of the United States, rural areas in Missouri face challenges meeting the demand for health care services. The following geographic analysis provides a series of maps and charts to learn more about the geographic distribution of nurses across the state.

Employment and Residence of Nurses within Missouri

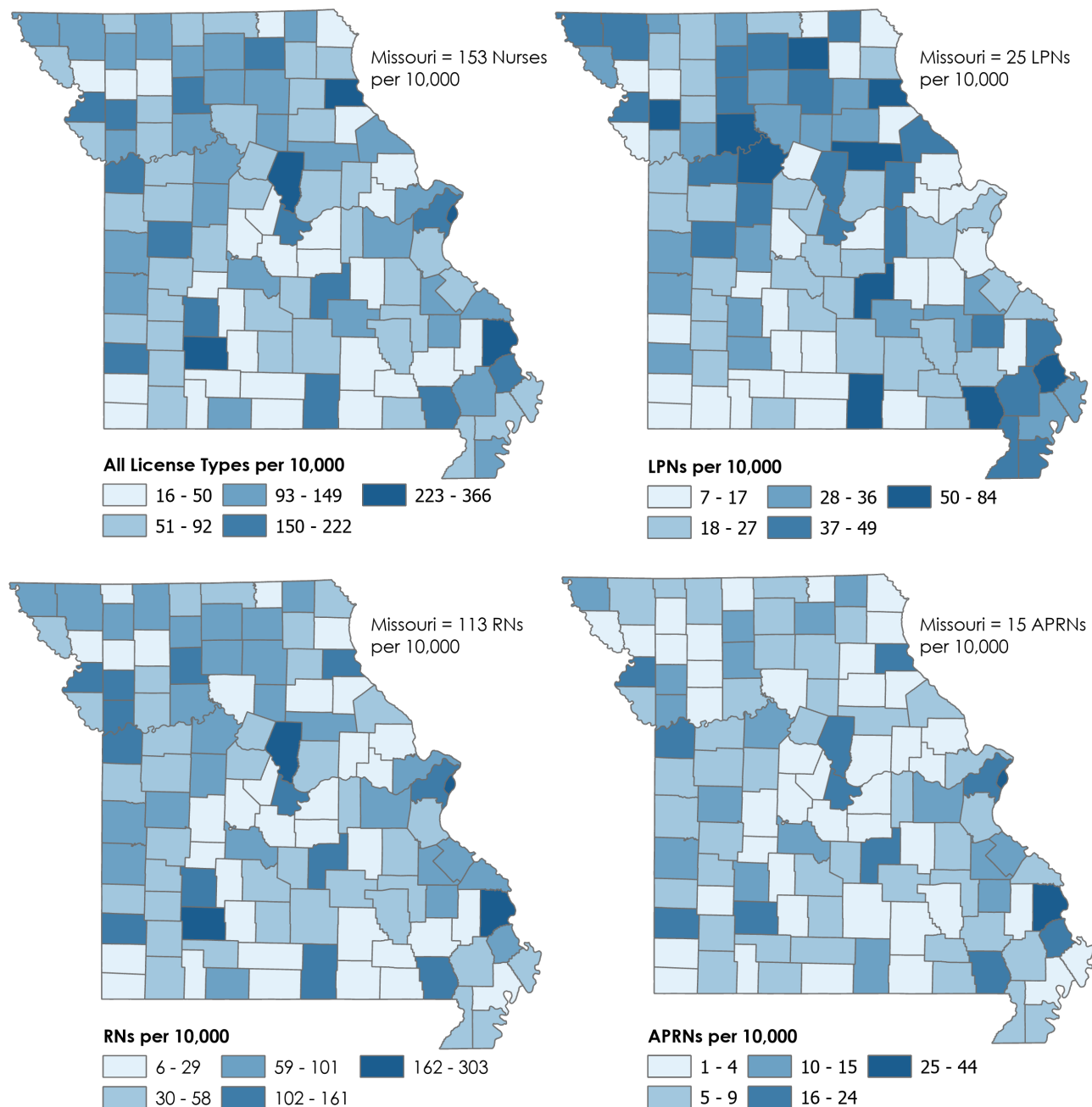
The maps below (Figures 10 and 11) group counties into five categories, showing the distribution of nurses at the county level by employment and residence using 2019 US Census population estimates. Counties with lighter shading have lower rates of nurses per 10,000 residents; counties with darker shading have higher rates. Nurses per 10,000 residents is a ratio that normalizes for population density at the county level. While many Missouri counties have fewer than 10,000 residents, this ratio allows comparisons among counties with different populations, much like “percent” ratios (i.e., “per 100”). The county employment and residence data associated with these maps are provided in Appendices 2 and 3.

In general, the maps indicate that rural counties tend to have lower rates of nurses per 10,000 residents than their metropolitan and micropolitan counterparts (Figure 10). These distribution patterns reflect the population density patterns and the location of regional medical trade centers. Most Missouri counties are defined as rural in that they are outside of Core Based Statistical Areas. There appear to be fewer employment opportunities for LPNs, RNs and APRNs in rural counties than in metropolitan and micropolitan counties. The overall rate of nurses per 10,000 residents is 78 in rural counties, 129 in micropolitan counties and 170 in metropolitan counties. This aligns with our knowledge of Health Professional Shortage Areas, defined by the U.S. Health Resources and Services Administration (HRSA).

This pattern is consistent for both the county of employment (Figure 10) and the county of residence (Figure 11). Of potential concern for meeting primary care needs in rural areas are low rates of APRNs employed in rural Missouri counties (6 APRNs per 10,000 residents) compared to micropolitan (11 per 10,000 residents) and metropolitan (17 per 10,000 residents). The exception to these overall patterns is with LPNs, who have higher employment rates in micropolitan (39 LPNs per 10,000 residents) and rural counties (26 LPNs per 10,000 residents) than in metropolitan counties (22 LPNs per 10,000 residents).

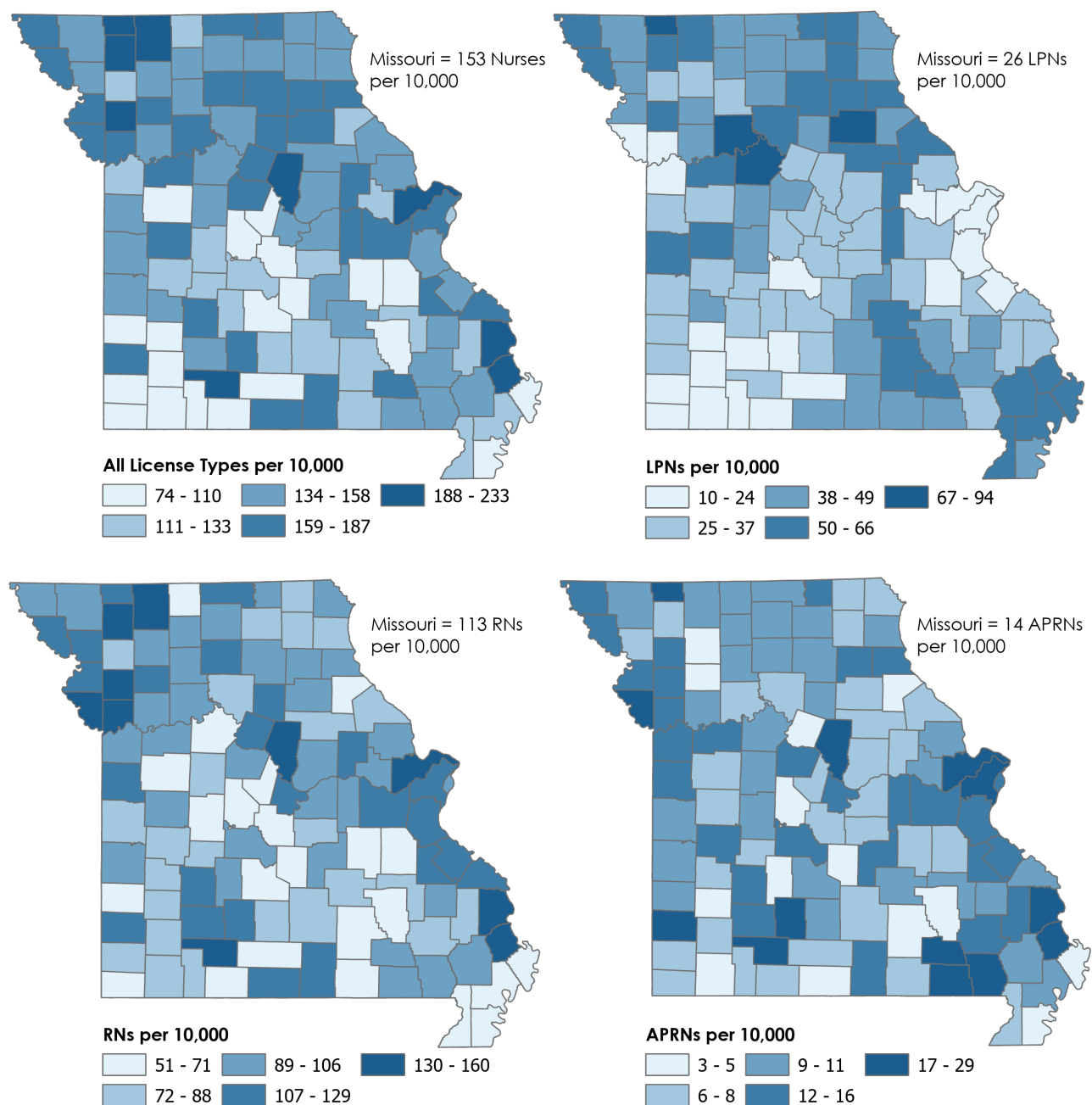
The rate of nurses by county of residence (153 per 10,000 residents) is equivalent to that of the rate of nurses by county of employment, indicating that most actively employed nurses who live in Missouri also work in Missouri.

Figure 10. County of Employment of Nurses Employed in Missouri



Created by: Center for Health Policy, University of Missouri
Source: Nursys, 1/1/2019-10/01/2021

Figure 11. County of Residence of Nurses Living in Missouri

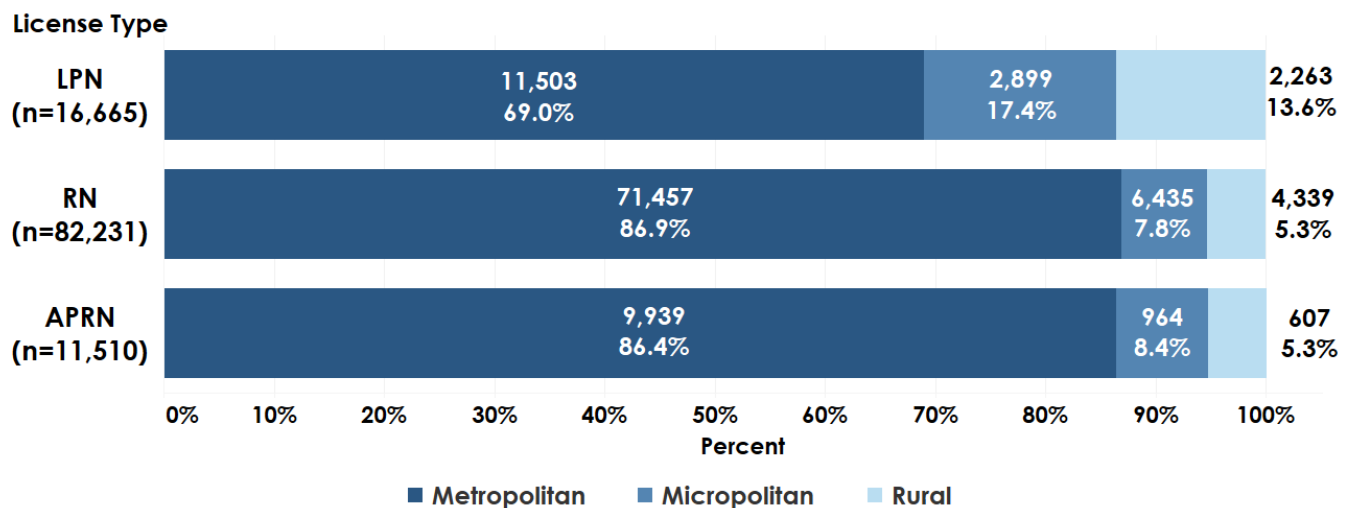


Created by: Center for Health Policy, University of Missouri
Source: Missouri Division of Professional Registration, 10/1/2021

Distribution across Metropolitan, Micropolitan, and Rural Counties

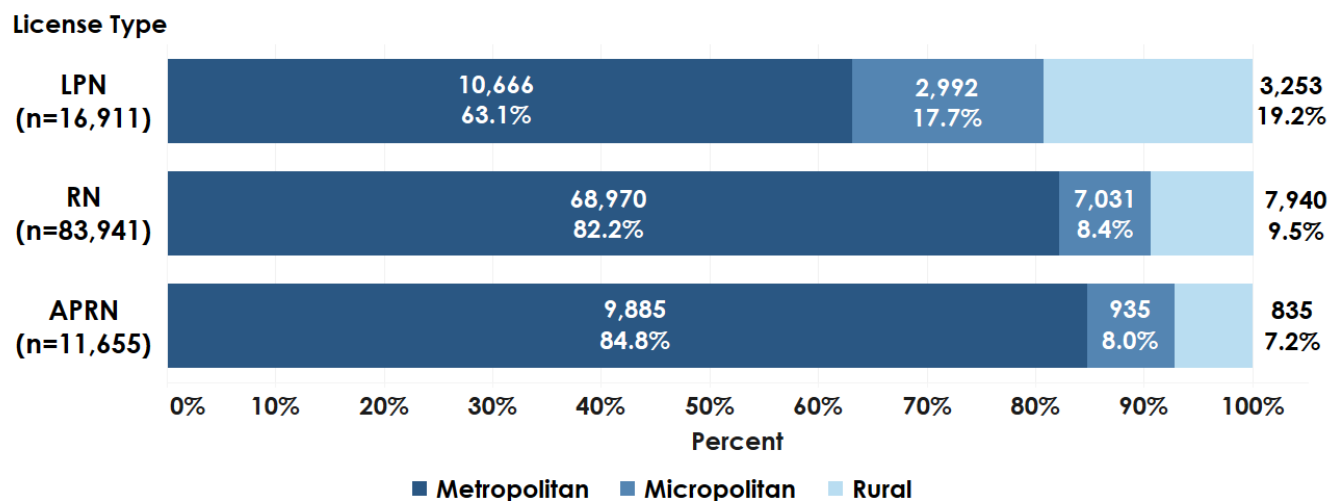
Most Missouri-licensed nurses work in metropolitan counties. The predominance of metropolitan-employed nurses is especially true for RNs and APRNs, with approximately 86% of nurses in each of these groups working in metropolitan counties and only 5.3% employed in rural counties. LPNs have higher representations in micropolitan (17.4%) and rural (13.6%) counties than RNs and APRNs (Figure 12). The higher proportion of LPNs working in micropolitan and rural areas corresponds with their employment setting: more LPNs work in nursing homes, extended care and assisted living facilities than any other setting; many of these facilities are located in rural areas and small towns. The low number of nurses employed in rural counties often coincides with a shortage of health care providers and facilities, including hospitals, urgent care, and other health care services.

Figure 12. Employment of LPNs, RNs and APRNs in Metropolitan, Micropolitan, or Rural Counties



Although the patterns for place of residence somewhat mirror those for employment, Missouri-licensed nurses are more likely to live in rural counties than they are to work in them. Still, over 80% of RNs and APRNs live in metropolitan counties (Figure 13).

Figure 13. Residence of LPNs, RNs and APRNs in Metropolitan, Micropolitan, or Rural Counties

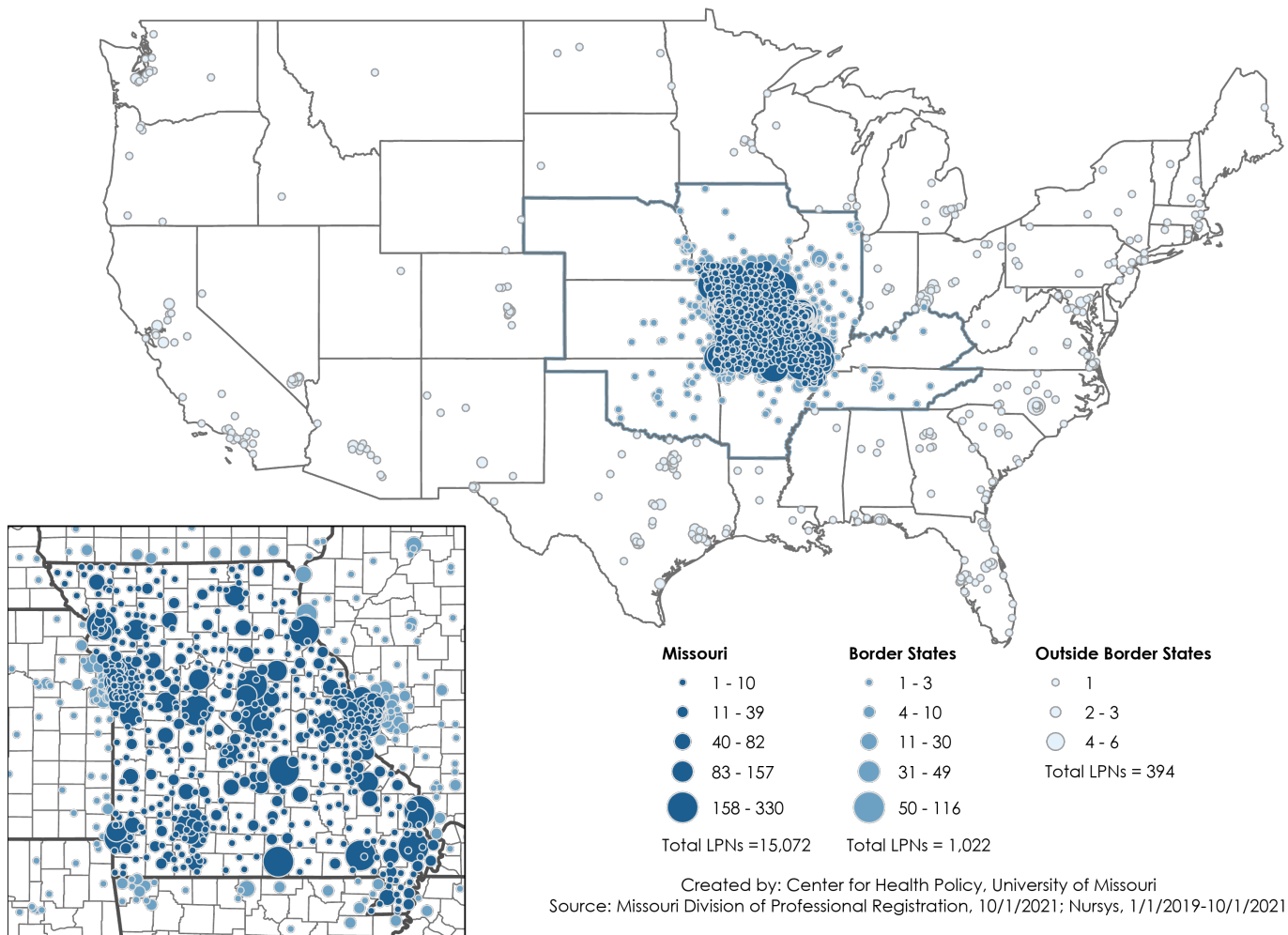


Employment ZIP Code for Nurses Living in Missouri

The next series of maps provides the employment ZIP codes for LPNs, RNs, and APRNs who are licensed in Missouri. The majority of all three groups of nurses work in Missouri. Those working outside Missouri are most likely to work in a border state, particularly within the Kansas City and St. Louis metropolitan regions. While there are many nurses with a Missouri license and an out-of-state employment county, the majority of these are in out-of-state counties adjacent to Missouri.

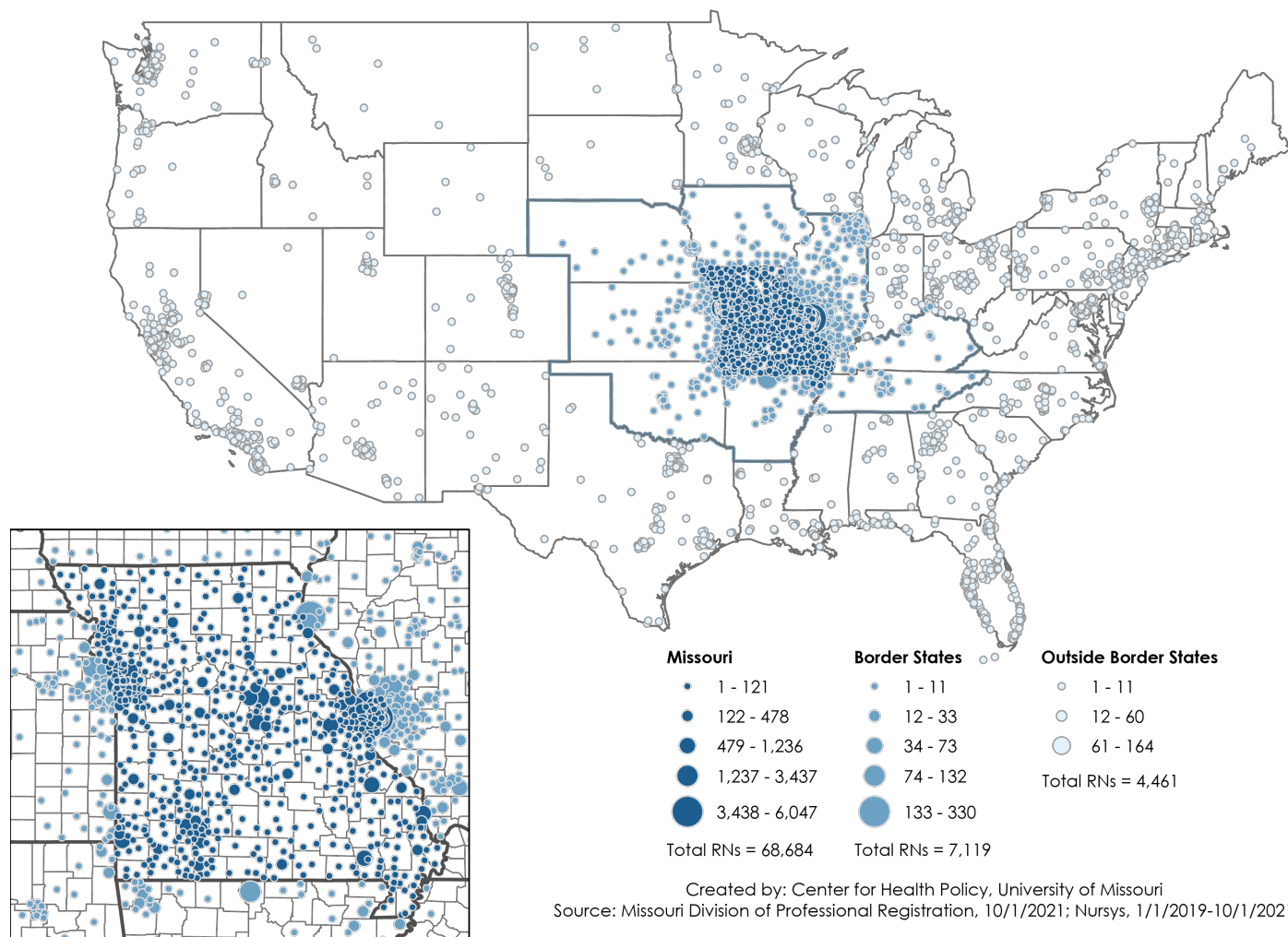
Focusing on LPNs licensed in Missouri, a large majority (92%) also have a place of employment with a Missouri ZIP code. Among those LPNs who are licensed in Missouri but are employed elsewhere, 74% have an employment with a ZIP code in a bordering state (Figure 14).

Figure 14. Employment ZIP Code of All LPNs Licensed in Missouri



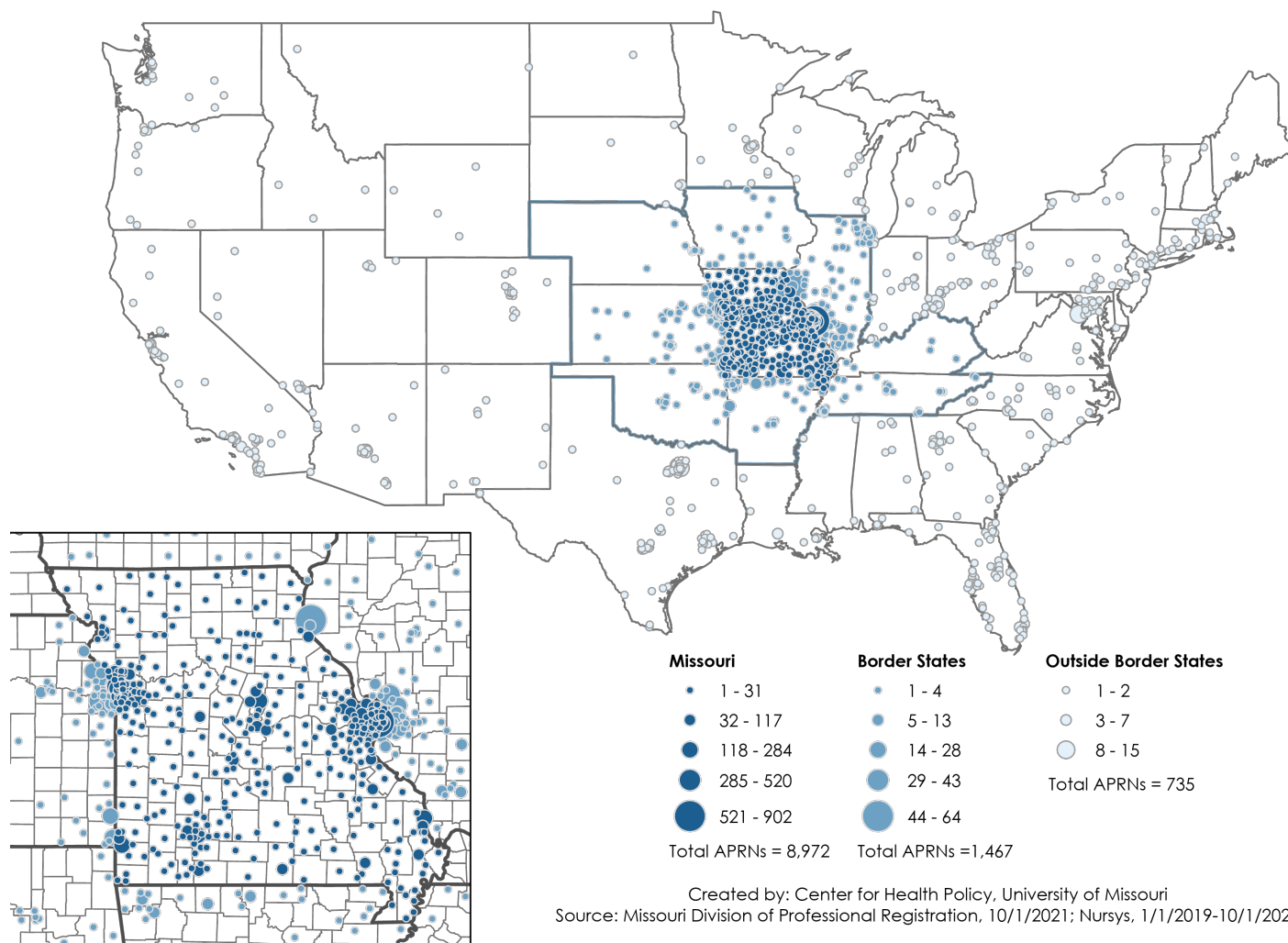
Although 84% of RNs who are licensed in Missouri have an employer with a Missouri ZIP code, they are more likely than LPNs to work outside of Missouri, with 10% working in a bordering state and 6% working beyond a border state (Figure 15).

Figure 15. Employment Zip Code of All RNs Residing in Missouri



Similar to RNs, 82% of APRNs who reside in Missouri have an employer with a Missouri ZIP code. Among APRNs, 13% work in a bordering state and 5% work beyond an outside border state (Figure 16).

Figure 16. Employment Zip Code of All APRNs Residing in Missouri



Age Distribution

In general, the nursing workforce is well distributed among age cohorts, and the average age of nurses in each license type is similar. The average age of LPNs is 46, only slightly older than RNs and APRNs who have an average age of 45. The largest age cohort for both LPNs and APRNs is 35-44 years old, while the largest cohort for RNs is 25-34.

Over one-quarter of actively employed LPNs are aged 35-44. Only 2.3% of LPNs fall into the 18–24-year-old cohort, and 8.8% of LPNs are 65 or older (Figure 17).

Figure 17. Distribution of Ages for LPNs Licensed in Missouri

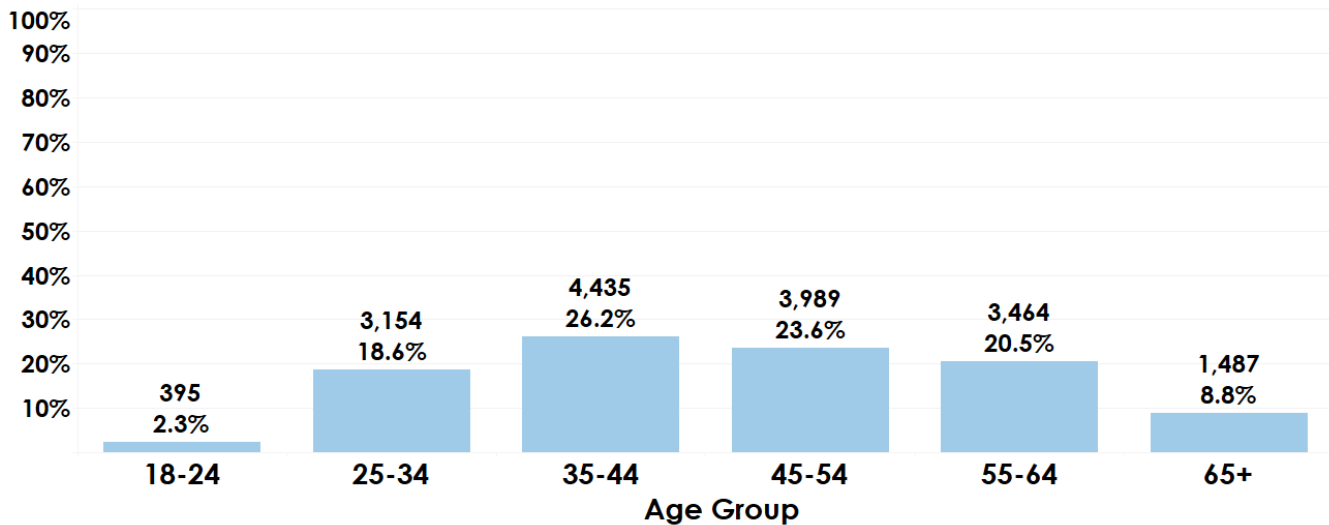
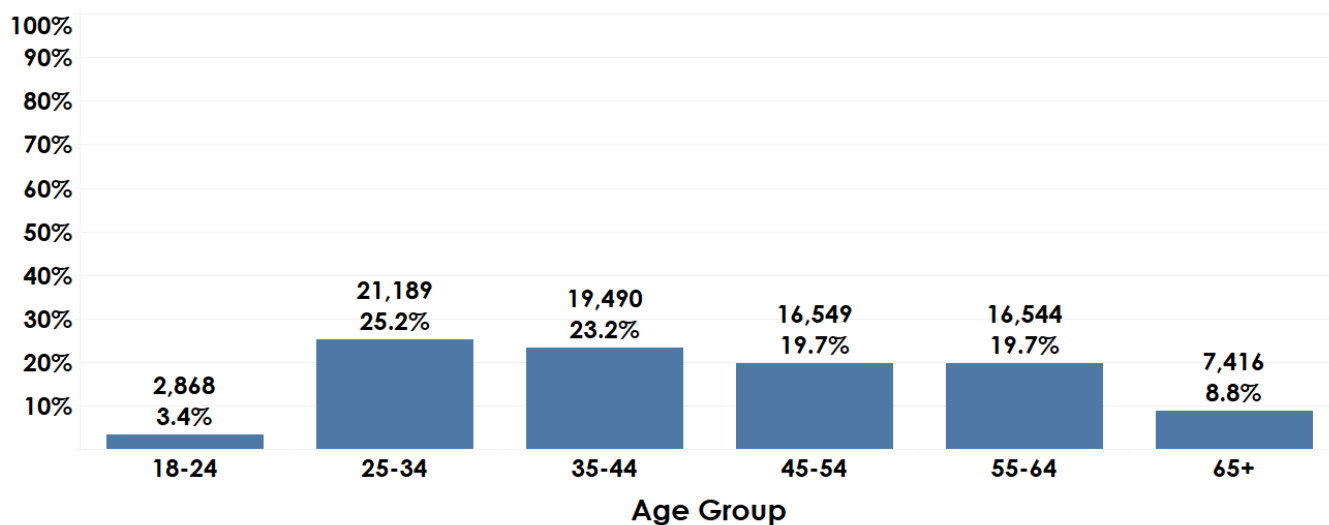
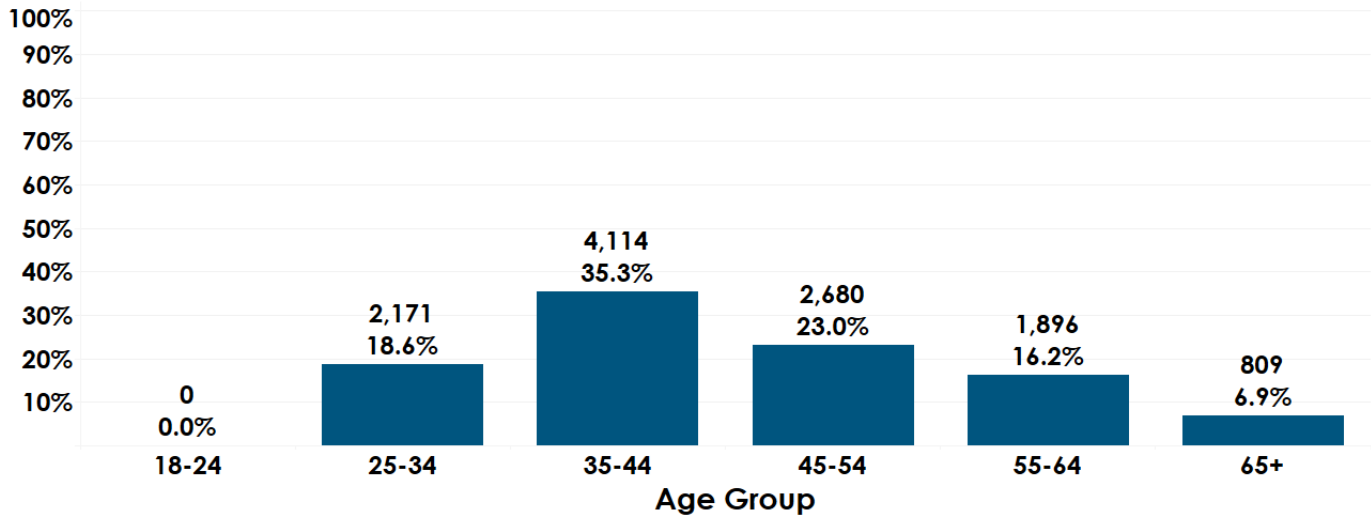


Figure 18. Distribution of Ages for RNs Licensed in Missouri



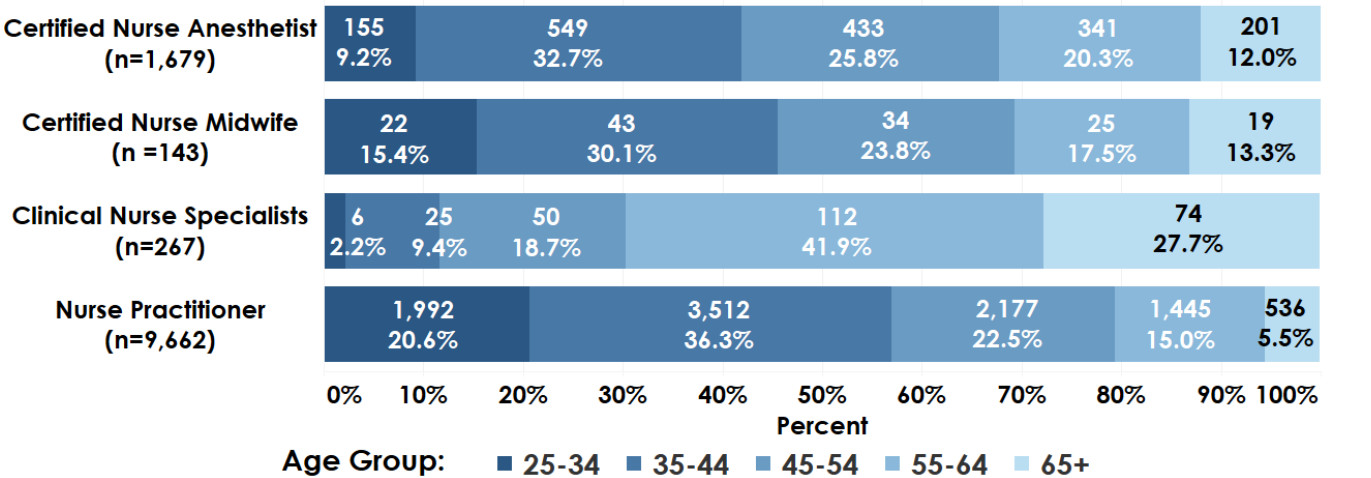
The largest age group of APRNs are those aged 35 to 44, comprising 35.3% of the population. There are no APRNs under the age of 25 licensed in Missouri, likely due to the higher levels of education required (Figure 19).

Figure 19. Distribution of Ages for APRNs Licensed in Missouri



The distribution of ages for APRNs varies greatly among the four certifications. Particularly noteworthy is the relatively large percent (27.7%) of Clinical Nurse Specialists who are 65 and older. Conversely, 20.6% of Nurse Practitioners are 25-34, and only 5.5% are 65 and older (Figure 20).

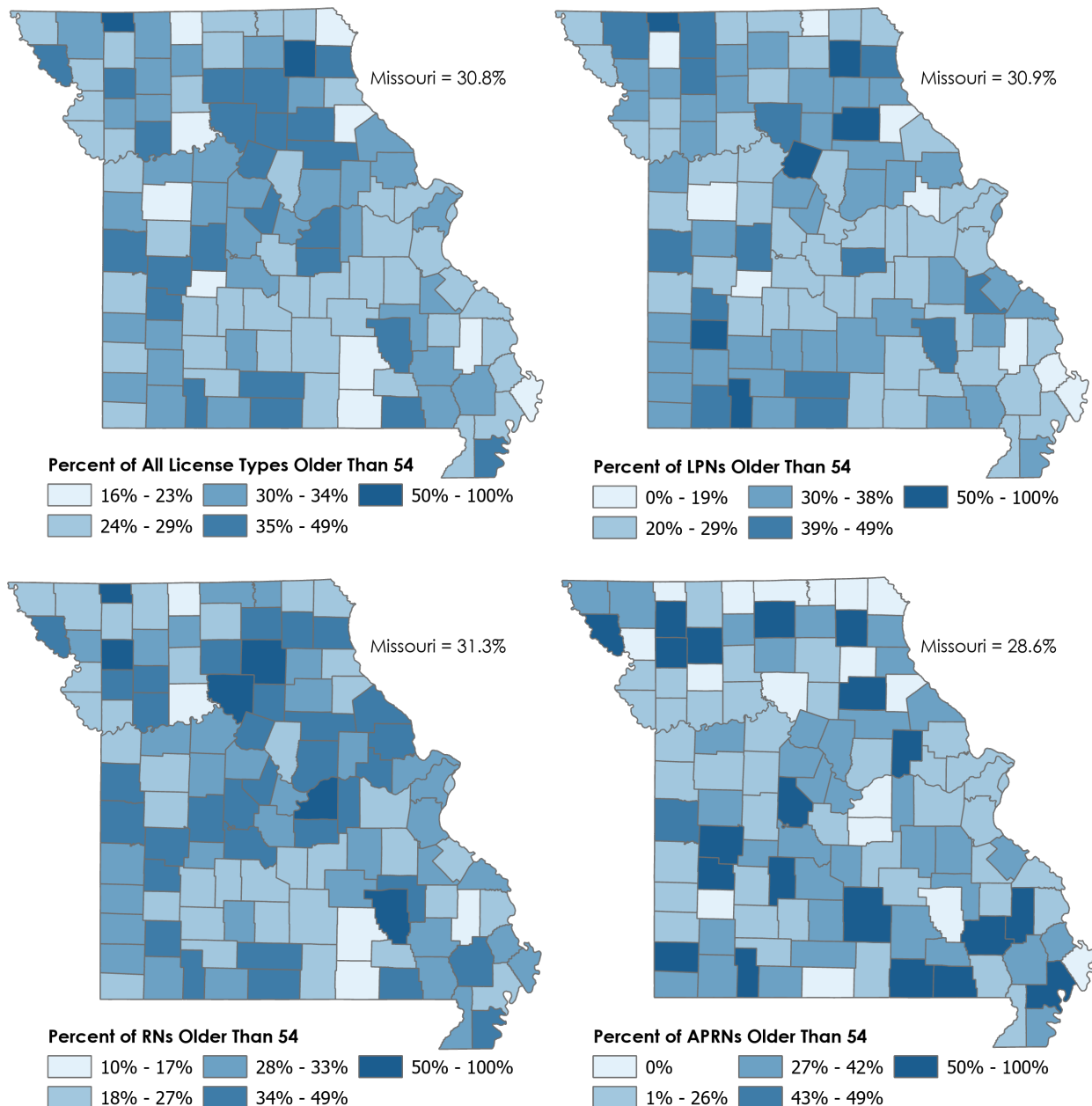
Figure 20. Distribution of Ages by APRN Certifications



Note: A small number of APRNs (N=80) have more than one certification; these nurses are reported for each certification. There were no APRNs under the age of 25.

To illustrate where the nursing workforce is nearing retirement age, a series of maps including those nurses who are older than 54 and employed in Missouri counties or the City of St. Louis is provided. Overall, the percentage of nurses over the age of 54 ranges from 16% (Bollinger County) to 58% (Worth County). More than half of the nurses in Knox and Worth counties, both located in Northern Missouri, are over the age of 54. For these two counties, the predominance of nurses older than 54 is especially pronounced among LPNs, with 80% of LPNs in Knox and 71.4% of LPNs in Worth over the age of 54. Although there are more counties with at least 50% of APRNs aged 54 and over, the average percentage of nurses older than 54 across counties for APRNs (28.6%) is slightly lower than for LPNs (30.9%) and RNs (31.2%) (Figure 21).

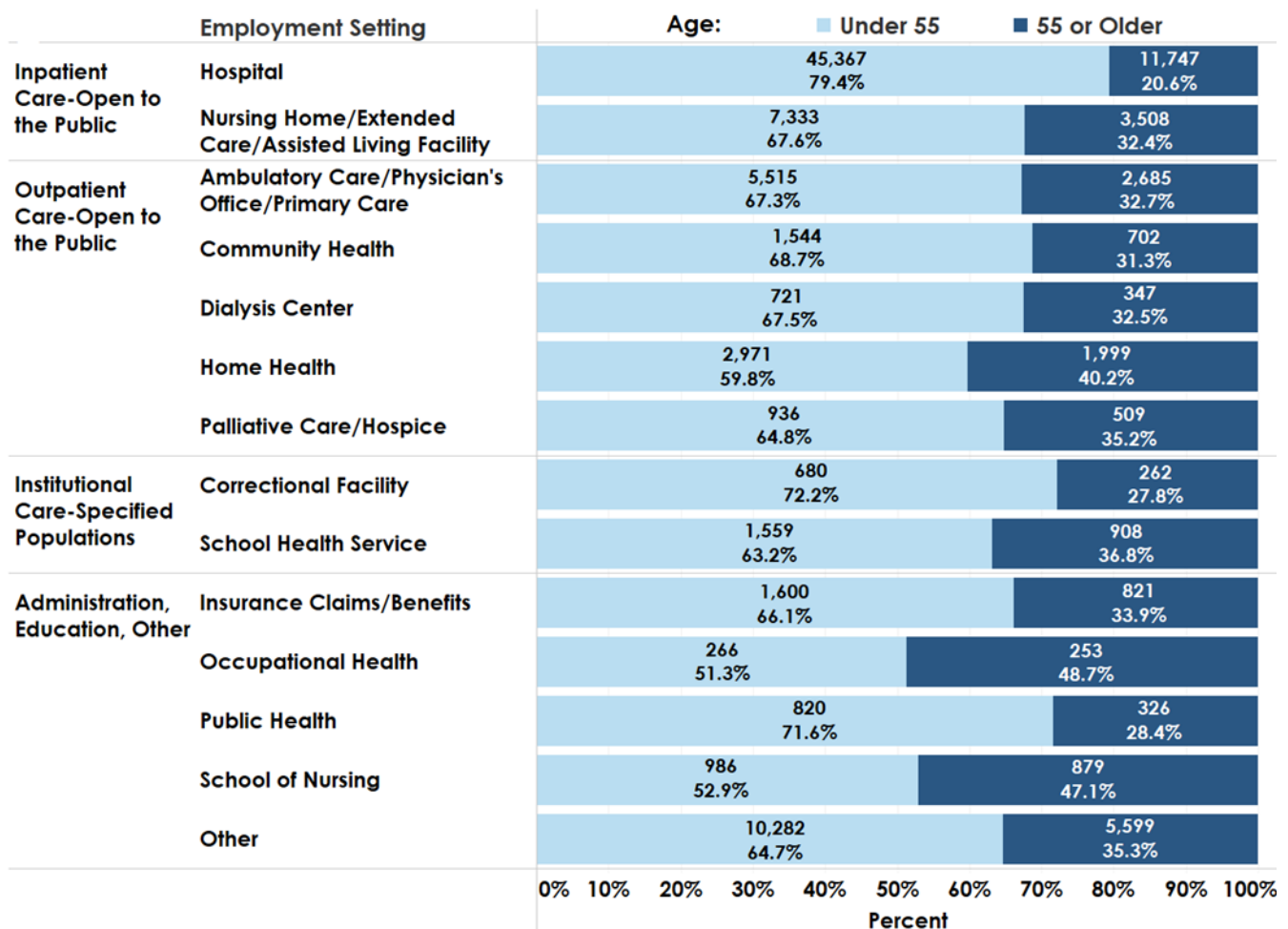
Figure 21. Percent of Nurses 55 Years and Older by County of Employment



Created by: Center for Health Policy, University of Missouri
 Source: Nursys, 1/1/2019-10/01/2021

The age distribution of nurses varies across employment settings. Hospitals have the lowest percentage of nurses who are 55 or older (20.6%). Conversely almost half of nurses working in occupational health (48.7%) and schools of nursing (47.1%) are at least 55 years of age (Figure 22). Additional information on employment setting is provided later in this report.

Figure 22. Percentage of LPNs, RNs, and APRNs Age 55 and Older by Employment Setting



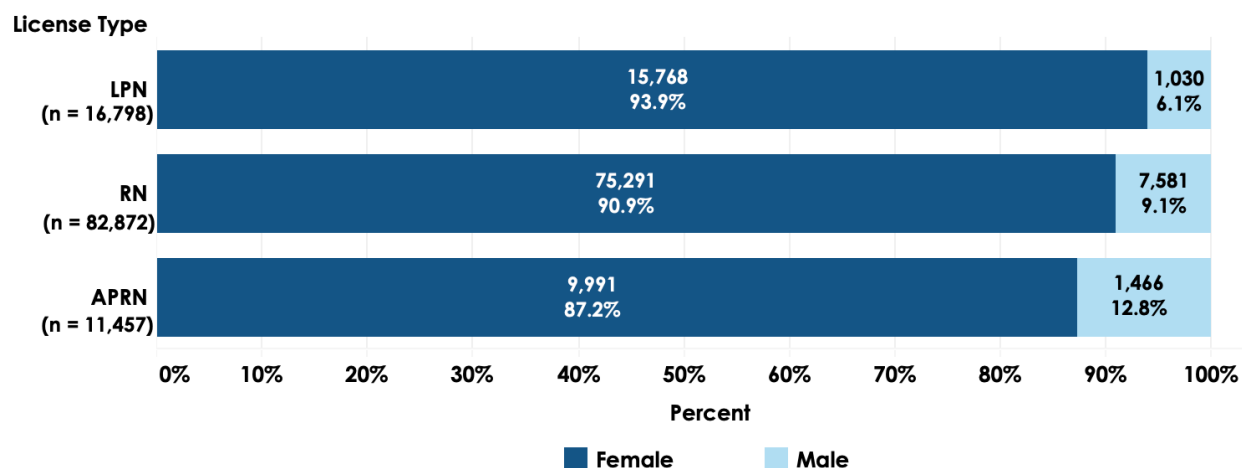
Note: Does not include nurses who did not report their employment setting (N=1,525).

Gender Distribution

Beginning in 2019, Nursys® respondents were able to identify as non-binary, with 0.03% or 38 actively employed nurses selecting this category. An additional 1,485 (1.3%) actively employed nurses chose not to answer this question. To protect privacy, data on non-binary people and those who skipped the question are removed from the charts and analysis below.

Nursing continues to be a female-dominated profession, with 90.9% of Missouri's actively employed nurses identifying as female. APRNs are the license type with the highest proportion of males (12.8%), including 1,466 nurses (Figure 23).

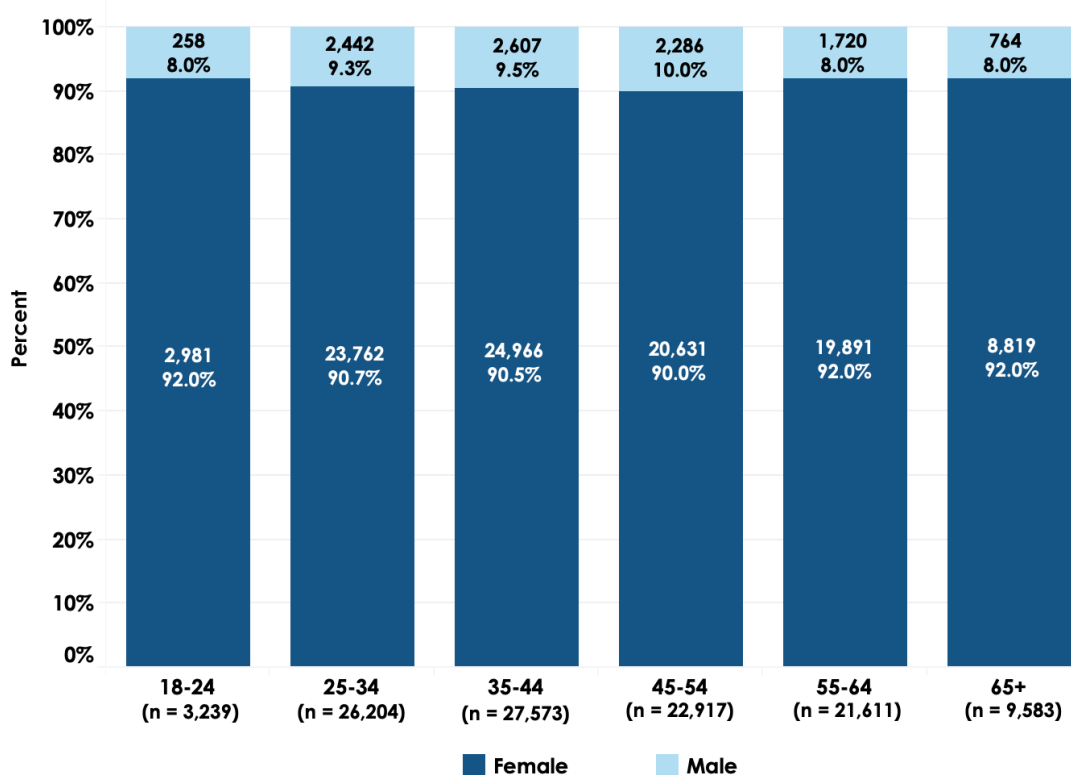
Figure 23. Gender of LPNs, RNs, APRNs Licensed in Missouri



Note: There are 38 actively employed nurses who are non-binary. To protect confidentiality, Figure 23 only includes male and female nurses. An additional 1,485 actively employed nurses chose not to answer this question.

The gender distribution of nurses is consistent across age groups. In fact, the youngest (18-24) and oldest (65 or older) age groups have equal percentages of female and male nurses (Figure 24).

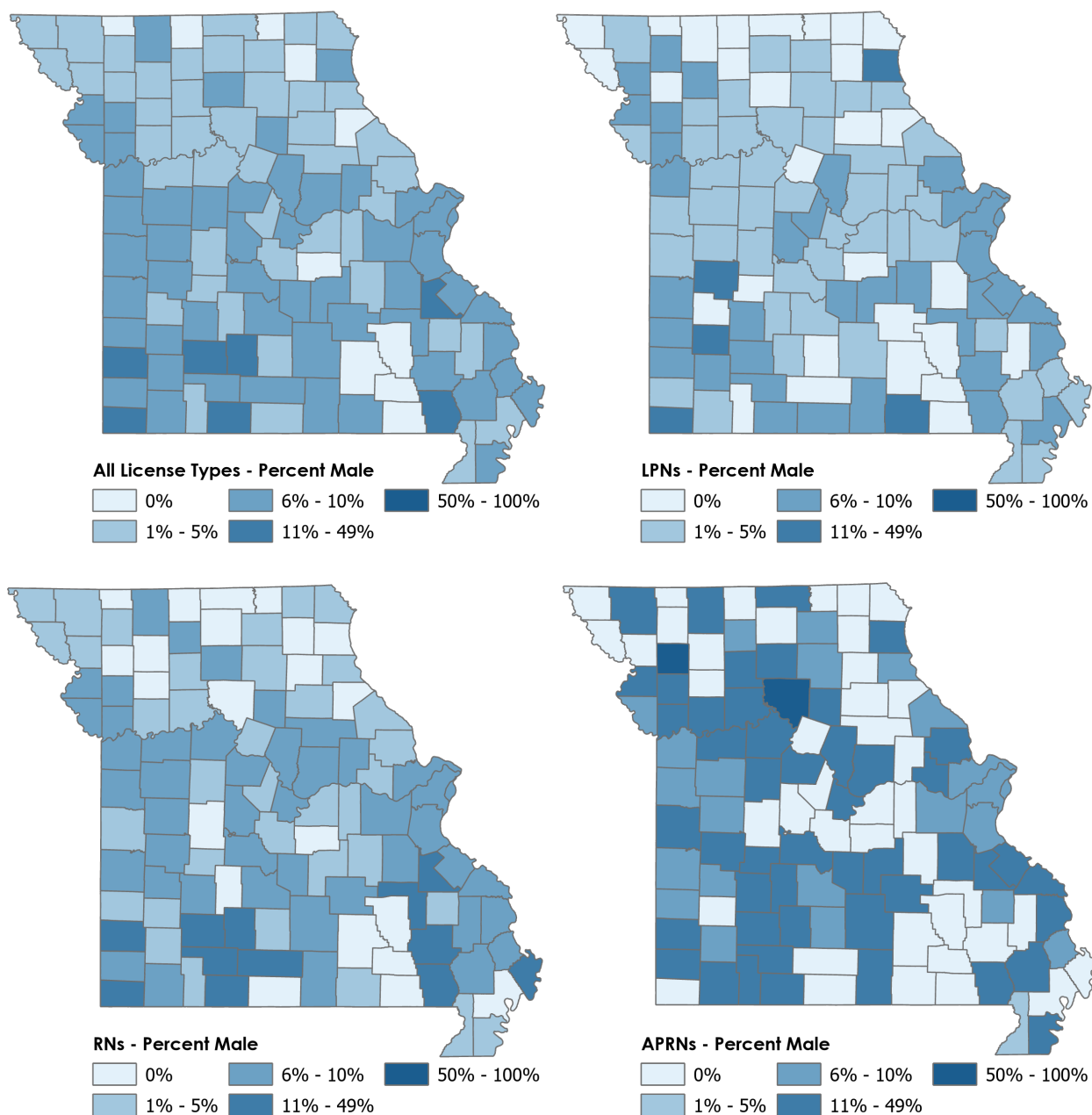
Figure 24. Gender of Missouri-Licensed Nurses Across Age Brackets



Note: There are 38 actively employed nurses who are non-binary. To protect confidentiality, Figure 23 only includes male and female nurses. An additional 1,485 actively employed nurses chose not to answer this question.

In Missouri the average county-level percentage of male nurses across all license types is only 5.7%. Using state-level data (see Figure 25), the overall percentage of male nurses is 8.1%, highlighting the fact that less-populated but more numerous rural counties have a greater gender imbalance than their metropolitan and micropolitan counterparts. In fact, ten counties in Missouri have zero male nurses employed. When considering all license types, the highest percent of male nurses (15%) is in Taney County. Across all license types, APRNs have the most male representation, with 4 counties having at least a 50% male APRN population. The county with the highest percent of male APRNs is Dekalb county, where 100% of APRNs are male (Figure 25).

Figure 25. Percent Male Nurses by County of Employment

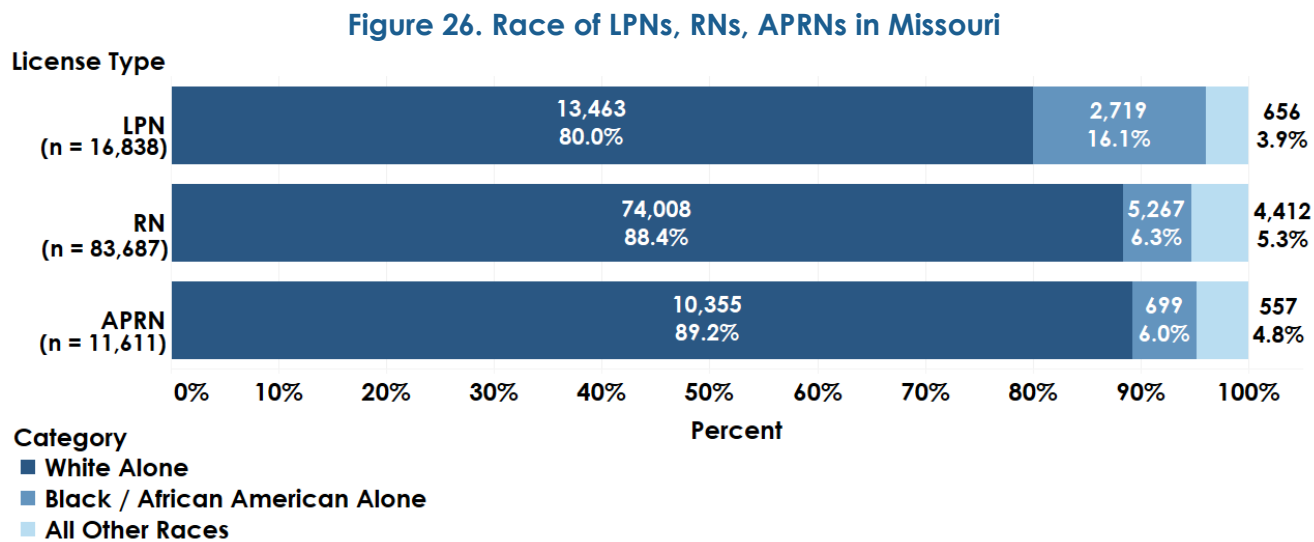


Created by: Center for Health Policy, University of Missouri
Source: Nursys, 1/1/2019-10/01/2021

Race and Ethnicity

In 2019, Nursys® aligned their collection of data on race and ethnicity with U.S. Census standards, which allow respondents to report multiple races and report their ethnicity as a separate category from race. Race categories include African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, Two or More Races and White.

The majority of nurses licensed in Missouri in all license types are White Alone, including 80.0% of LPNs, 88.4% of RNs, and 89.2% of APRNs. Black or African American nurses are underrepresented among RNs and APRNs. According to the 2020 US Census⁴, 12.4% of Missourians are Black or African American Alone, yet only 6% of RNs and APRNs reported their race as Black or African American Alone. Conversely, the percentage of LPNs who are Black or African American Alone (16.1%) is higher than the general Missouri population (Figure 26).

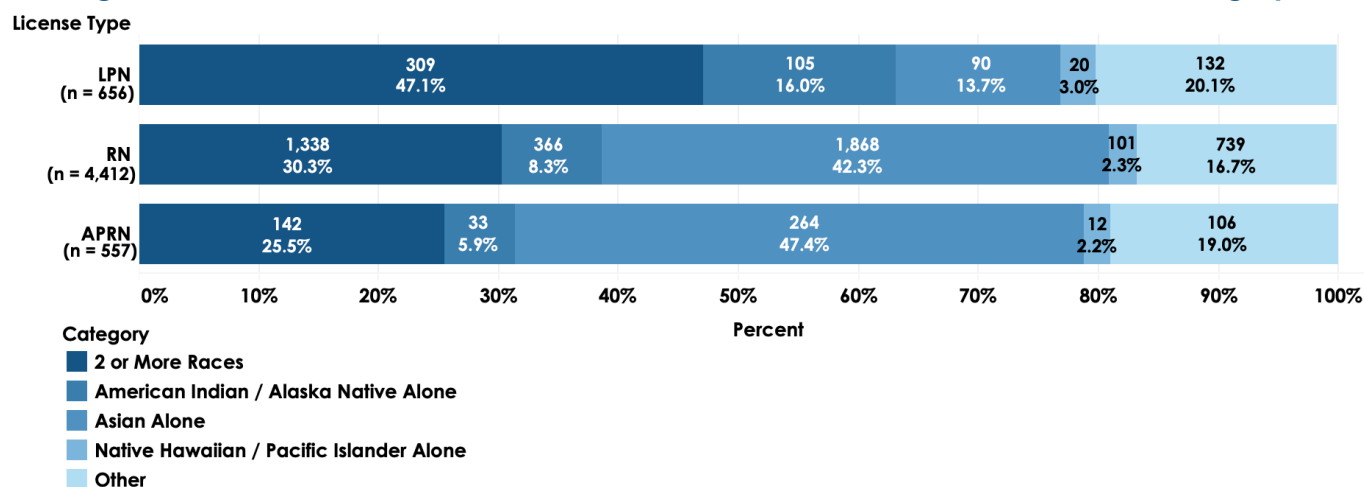


Note: Does not include nurses who did not report their race (N=514).

About 5% of nurses licensed in Missouri are situated in the category “All Other Races.” This category includes nurses who selected American Indian/Alaska Native Alone, Asian Alone, Native Hawaiian/Other Pacific Islander Alone, Two or More Races, and nurses who did not identify with any of the race categories provided and selected “Other.” RN and APRN nurses who selected one of these categories most often selected Asian Alone. Almost half of LPNs (47.1%) included in this category selected two or more racial identities (Figure 27).

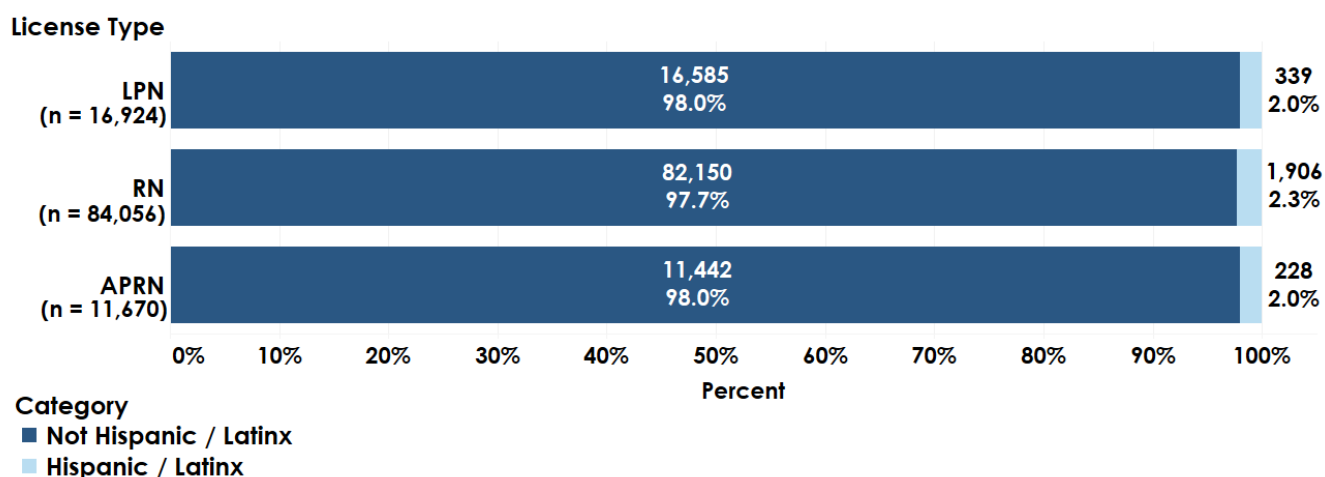
⁴ <https://www.census.gov/library/stories/state-by-state/missouri-population-change-between-census-decade.html>

Figure 27. Race of LPNs, RNs, APRNs in Missouri included in “All Other Races” Category



Ethnicity includes those who identify as Hispanic or Latinx, and those who do not. Approximately 2% of LPNs, RNs, and APRNs in Missouri identify as Hispanic or Latinx (Figure 28). According to the 2020 US Census, 4.9% of Missourians are Hispanic or Latinx, demonstrating that this ethnicity is underrepresented among nurses of all license types.

Figure 28. Ethnicity of LPNs, RNs, APRNs Licensed in Missouri



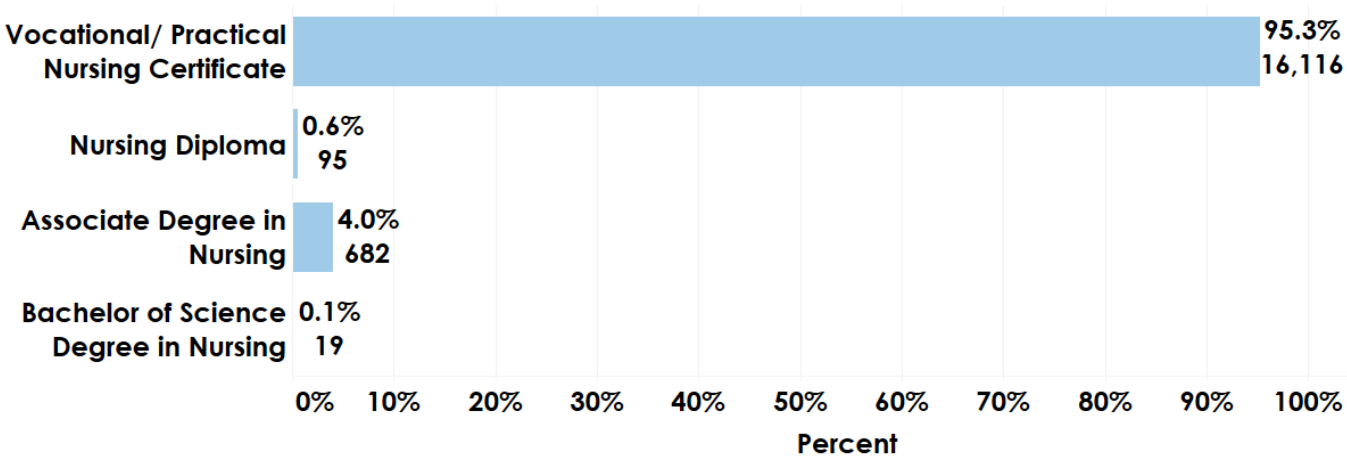
Note: Within Nursys®, respondents identify as Hispanic/Latinx by either selecting or not selecting this category; therefore, the number of nurses who did not report their ethnic identity is unknown. Since the percentage is computed from all nurses, it is possible that the percentage of Hispanic/Latinx nurses is higher than reported in Figure 28.

Education

The Merged dataset includes multiple education measurements, including initial level of nursing education, highest level of education, and highest level of nursing education. Many nurses hold multiple degrees, both in nursing and other fields, and many nurses enter the field with one type of diploma or degree and add additional nursing degrees over time. The following analysis explores highest level of nursing education for LPNs, RNs, and APRNs.

Almost all LPNs (95.3%) hold a Vocational or Practical Nursing Certificate as their highest degree. A small percentage of LPNs (4%) hold an Associate Degree in Nursing (Figure 29).⁵

Figure 29. Highest Level of Nursing Education of LPNs

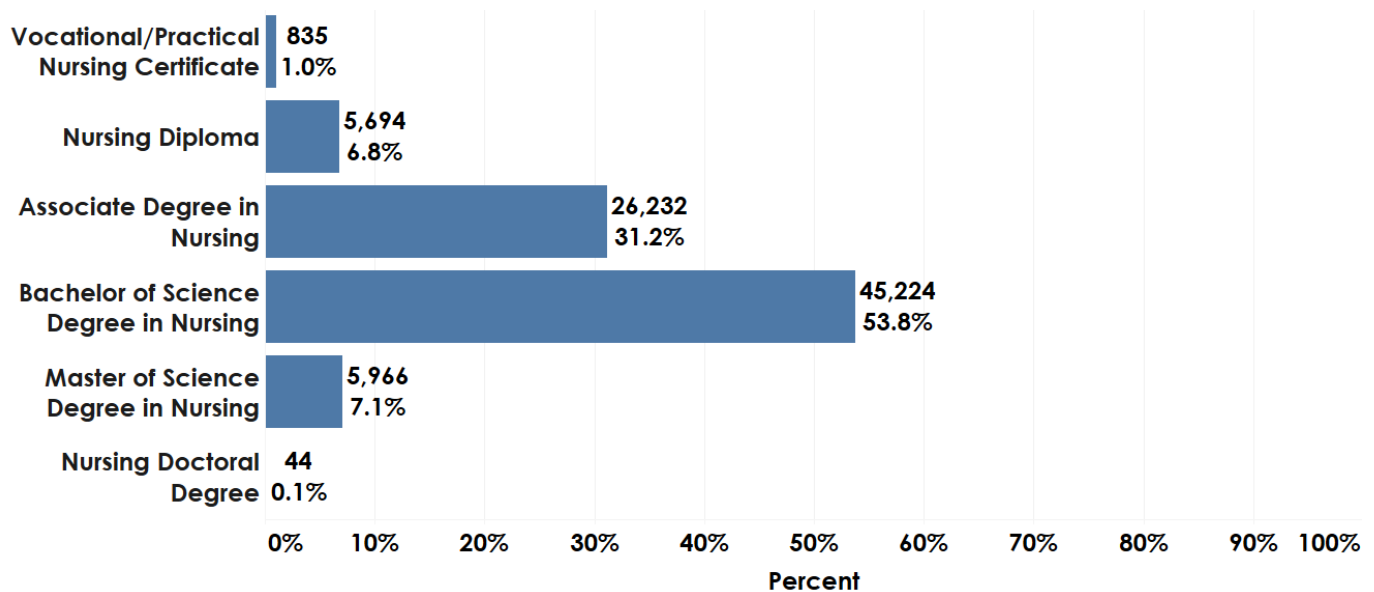


Note: does not include LPNs who did not report their highest level of nursing education (N=6) or who selected other degree (N=6).

⁵ Missouri law allows a person who has completed a RN program to obtain a LPN license after completing a course on the role of a LPN and passing the national LPN licensure exam. That may account for LPNs with a Nursing Baccalaureate Degree.

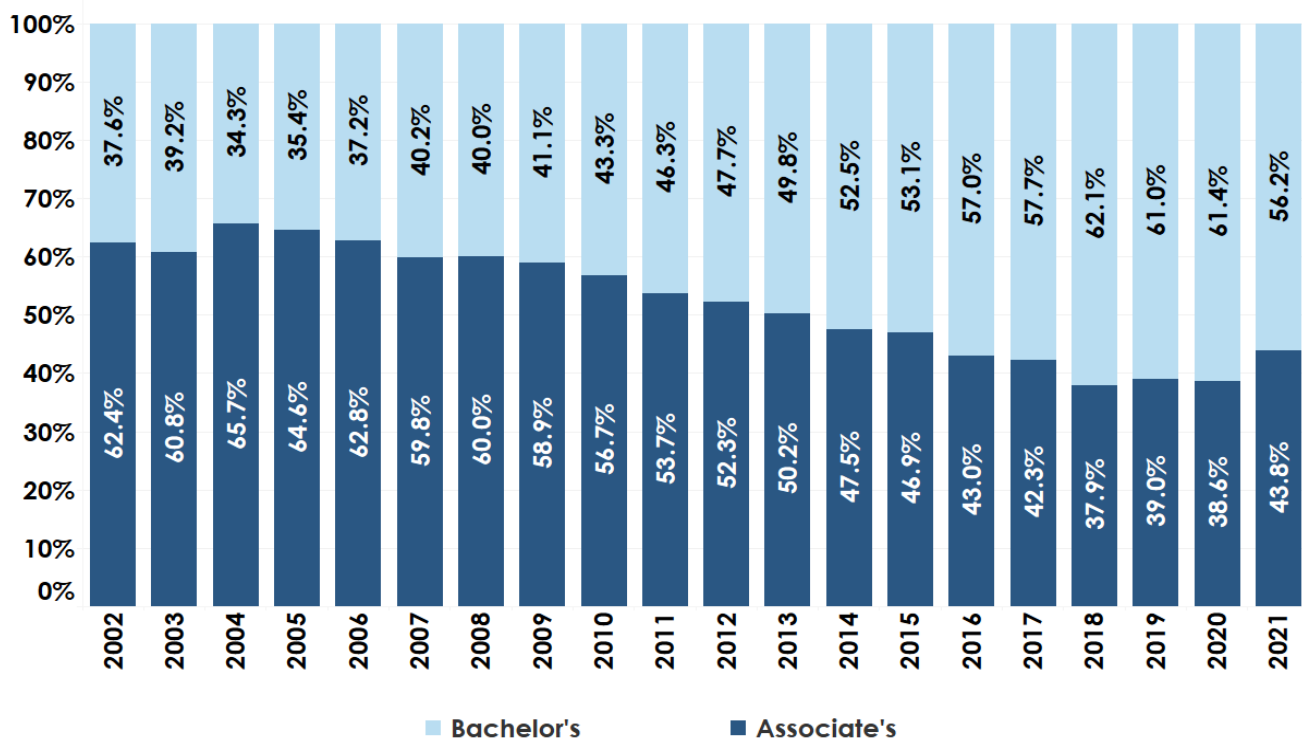
More than half of actively employed RNs (53.8%) report a Bachelor of Science in Nursing as their highest level of nursing education. An additional 31.2% hold an Associate Degree in Nursing (Figure 30). Additional analysis of RN's initial degree type by the year it was received shows that over the past two decades, RNs are increasingly earning a Bachelor of Science Degree in Nursing as their first nursing degree (Figure 31).

Figure 30. Highest Level of Nursing Education of RNs



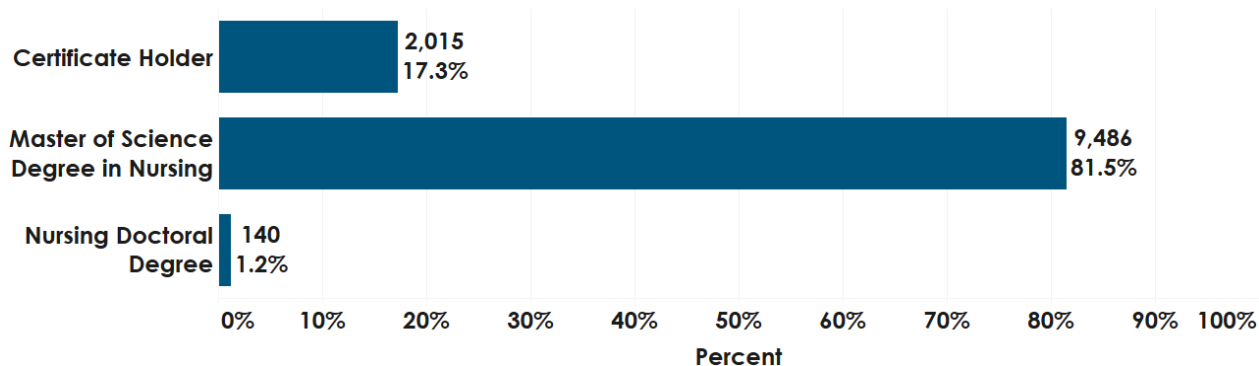
Note: Does not include RNs who did not report their highest level of nursing education (N=61).

Figure 31. Initial Education for Missouri-Licensed RNs by Year (2002-2021)



APRNs are currently required to hold a graduate degree for initial APRN recognition in Missouri. The large majority of APRNs (81.5%) hold a Master of Science Degree in Nursing as their highest level of nursing education. A small percentage of APRNs (1.2%) hold a Nursing Doctoral Degree. The remainder of APRNs (17.3%) are Certificate Holders. Certificate Holders are comprised of two groups: 1) APRNs who received recognition before new educational requirements were in place and are grandfathered in, or 2) APRNs whose initial recognition was received in another state and later applied for Missouri recognition (Figure 32).

Figure 32. Highest Level of Nursing Education of APRNs

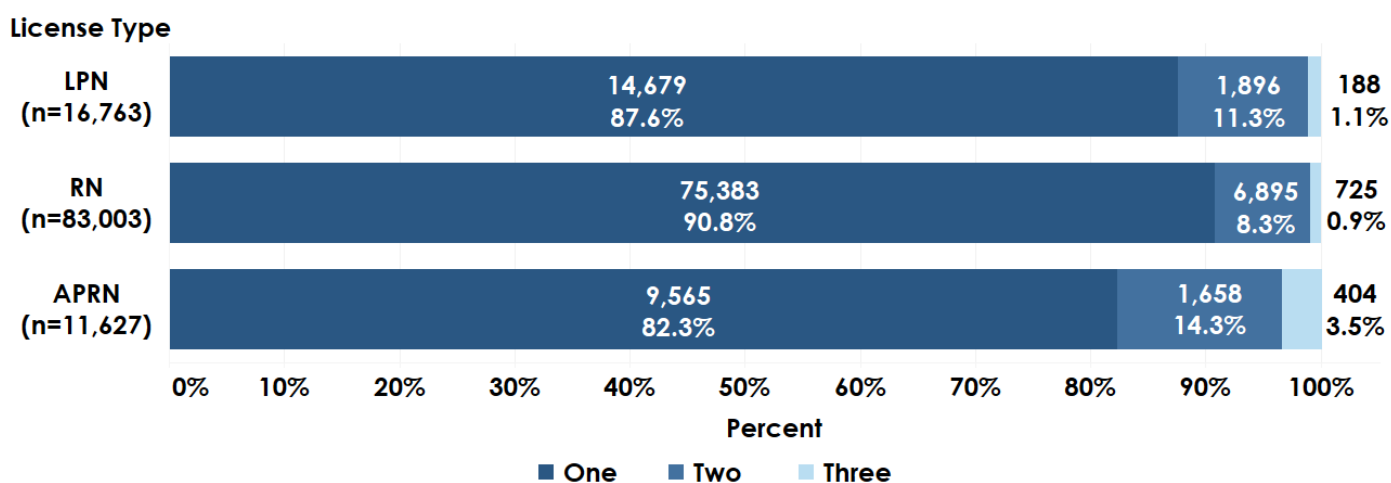


Note: Does not include APRNs who did not report their highest level of nursing education (N=29).

Employment Position Description

Employment position description captures the primary job titles under which Missouri-licensed nurses are employed. Most nurses of all license types hold only one position or job title; however, 10.6% hold two or more nursing positions. APRNs are most likely to hold multiple nursing positions, with 17.8% holding two or three positions (Figure 23).

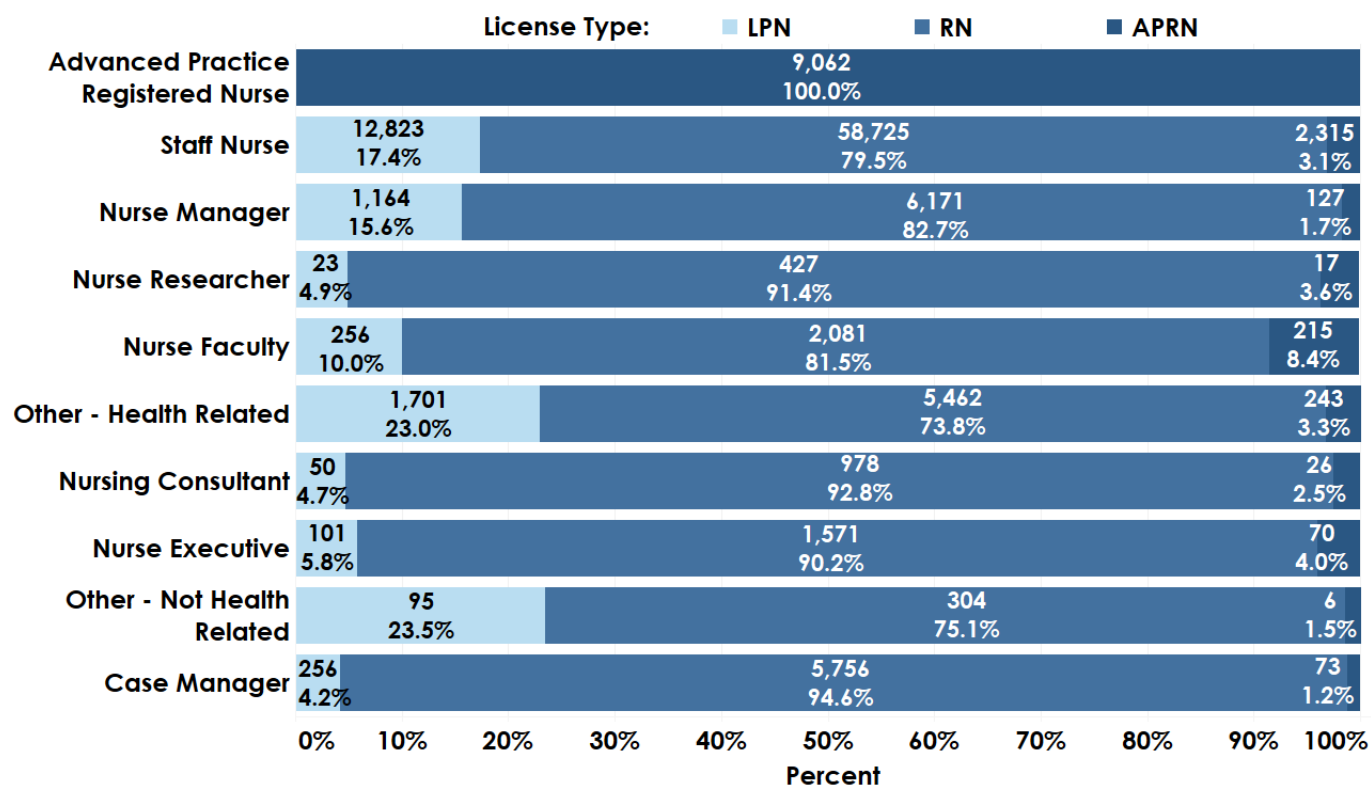
Figure 33. Number of Positions Currently Held by LPNs, RNs, and APRNs



Note: Does not include 1,257 nurses who did not answer this question.

Except for Advanced Practice Registered Nurse, the majority of nurses in each of the position descriptions are RNs. Over one-fifth of nurses who selected “Other – Health Related” (23%) and “Other – Not Health Related” (22.6%) are LPNs (Figure 34).

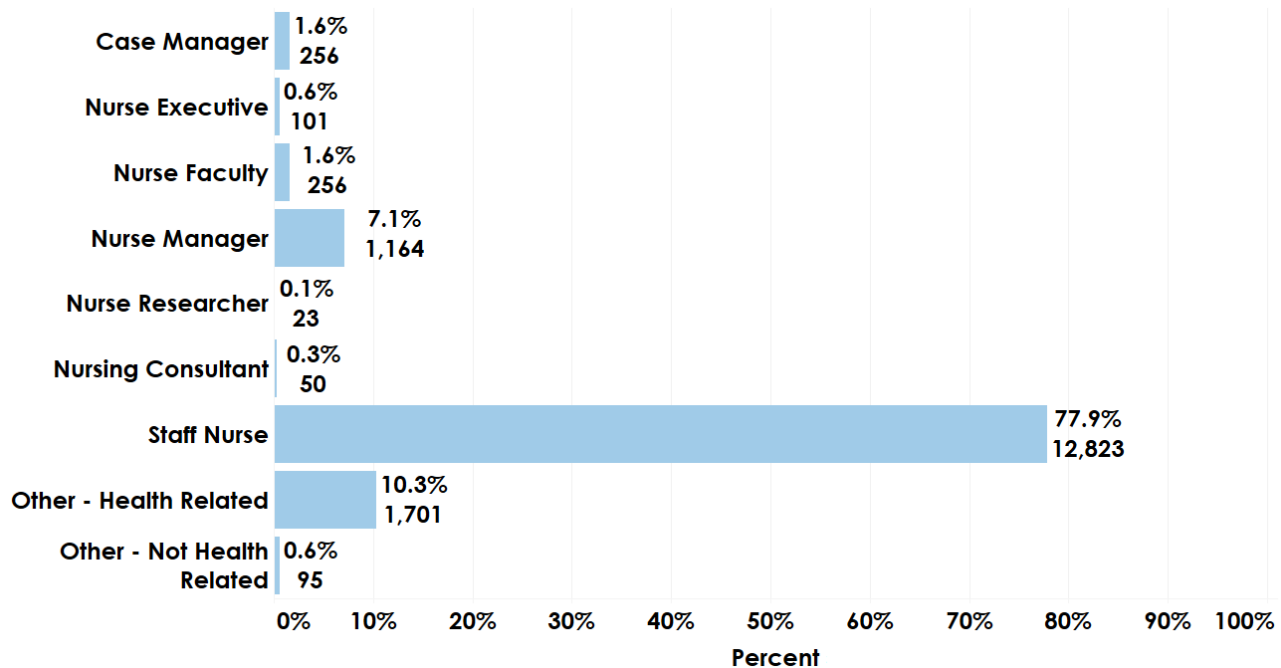
Figure 34. Position Description of LPNs, RNs, and APRNs



Note: Does not include nurses who did not report their position description (n=2,552) or who had an invalid response (i.e., LPN or RN selecting the position of Advance Practice Nurse) (n=573).

Over three-quarters of LPNs who reported their position description are Staff Nurses (77.9%). Other-Health Related (10.3%) and Nurse Manager (7.1%) are other common position descriptions for LPNs (Figure 35).

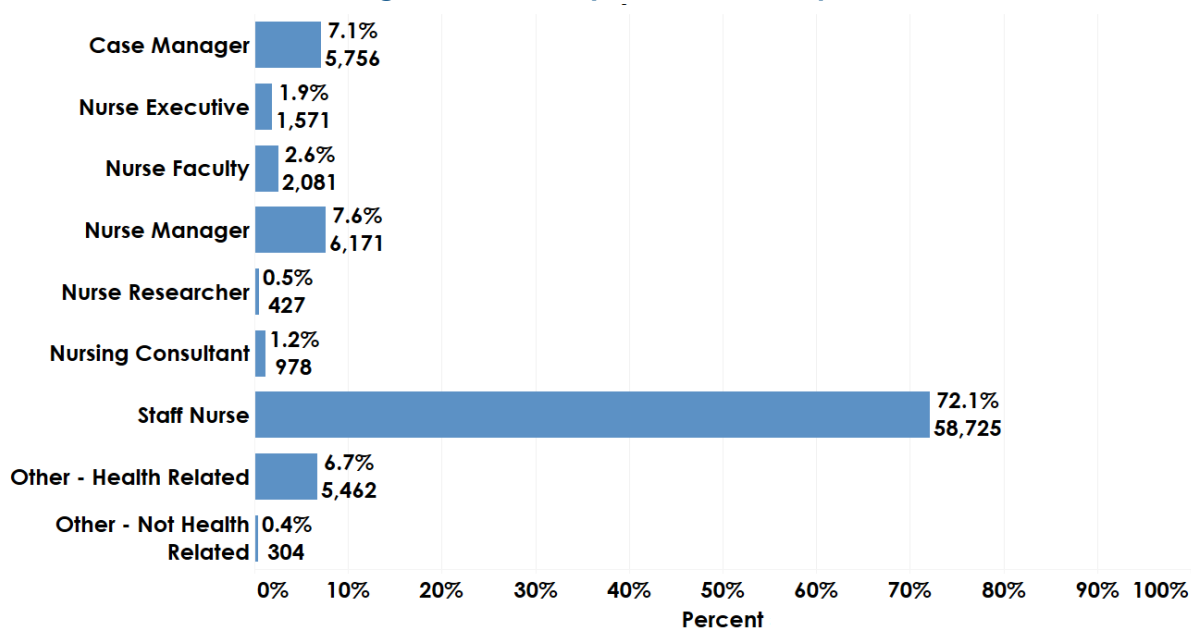
Figure 35. Primary Position Description of LPNs



Note: Does not include LPNs who did not provide a primary employment position (n=370) or who selected an invalid response (n=85).

Like LPNs, RNs most commonly reported their position as Staff Nurse, with 72.1% of RNs in that category. There are three additional position descriptions with sizeable numbers of RNs, including Nurse Manager (7.6%), Case Manager (7.1%) and Other-Health Related (6.7%) (Figure 36).

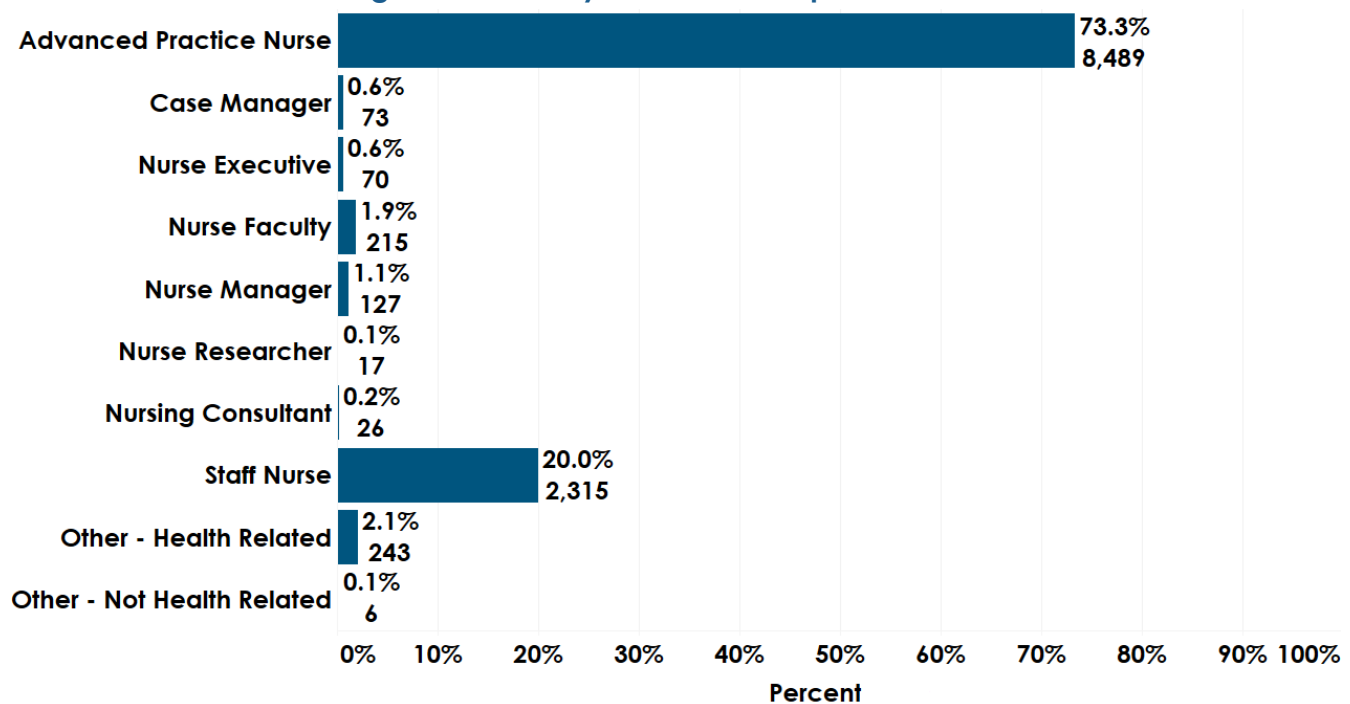
Figure 36. Primary Position Description of RNs



Note: Does not include RNs who did not provide a primary employment position (n=2,093) or who selected an invalid response (n=488).

About three-quarters of APRNs (73.3%) have a position description of Advanced Practice Registered Nurse. Another 20% of APRNs are staff nurses (Figure 37).

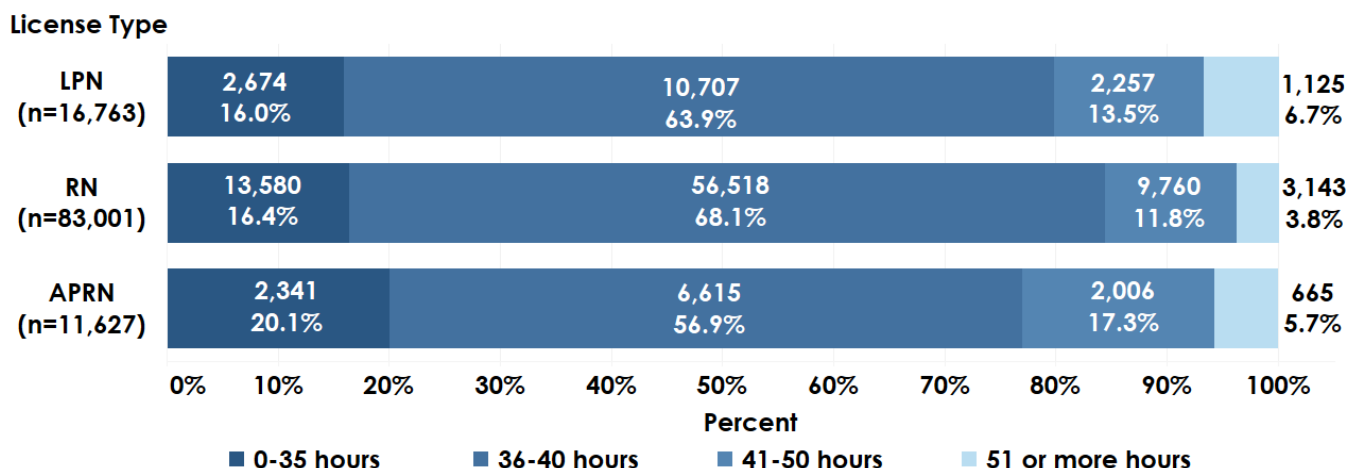
Figure 37. Primary Position Description of APRNs



Note: Does not include APRNs who did not provide a primary employment position (n=89).

Across all license types, 16.7% of nurses report working more than 40 hours per week. Among license types, RNs are most likely to report working the standard number of hours considered fulltime in nursing (36-40 hours), with 68.1% of RNs in this category. LPNs are the license type most likely to work 51 hours or more, with 6.7% reporting these many hours. APRNs are not only most likely to work over 40 hours (23%) but also most likely to work fewer than 36 hours, with 20.1% of APRNs averaging 0-35 hours per week (Figure 38).

Figure 38. LPNs, RNs, and APRNs Average Hours Per Week Working as a Nurse



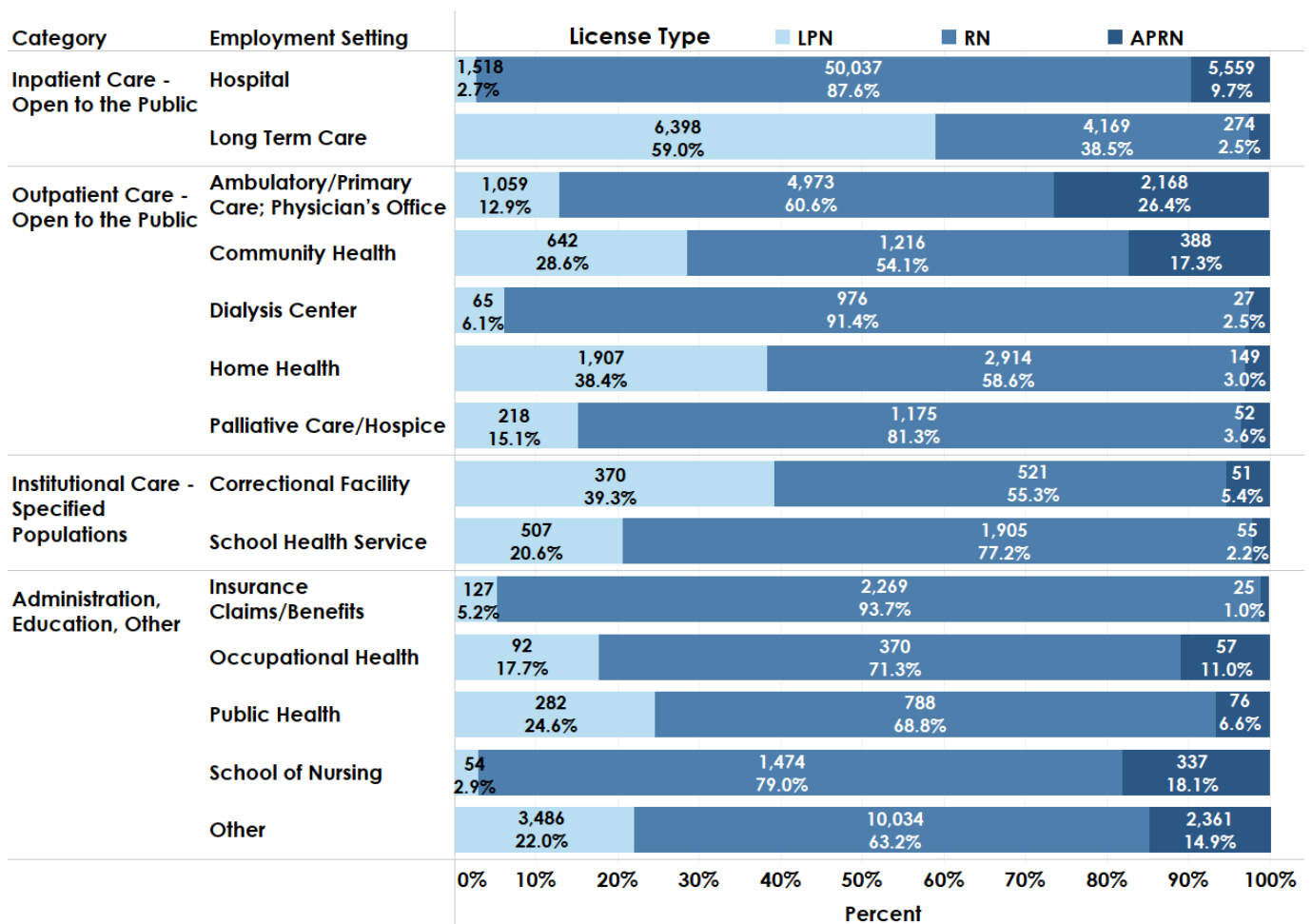
Note: Does not include nurses who did not report their average hours per week (n=1,259), including 161 LPNs, 1,055 RNs, and 43 APRNs.

Employment Setting

Employment setting includes the range of places where nurses practice, including inpatient care, outpatient care, institutional care and administration, education and other functions.

RNs comprise the largest group of nurses in every employment setting, except the category which includes nursing homes, extended care, and assisted living facilities; LPNs comprise the majority of nurses in this category (59%). LPNs also provide over one-third of the nursing workforce in correctional facilities (39.3%), and home health care (38.4%). The highest proportion of nurses who are APRNs are in the category which includes ambulatory care, physician's offices and primary care, with 26.4% of nurses being APRNs in this employment setting (Figure 39).

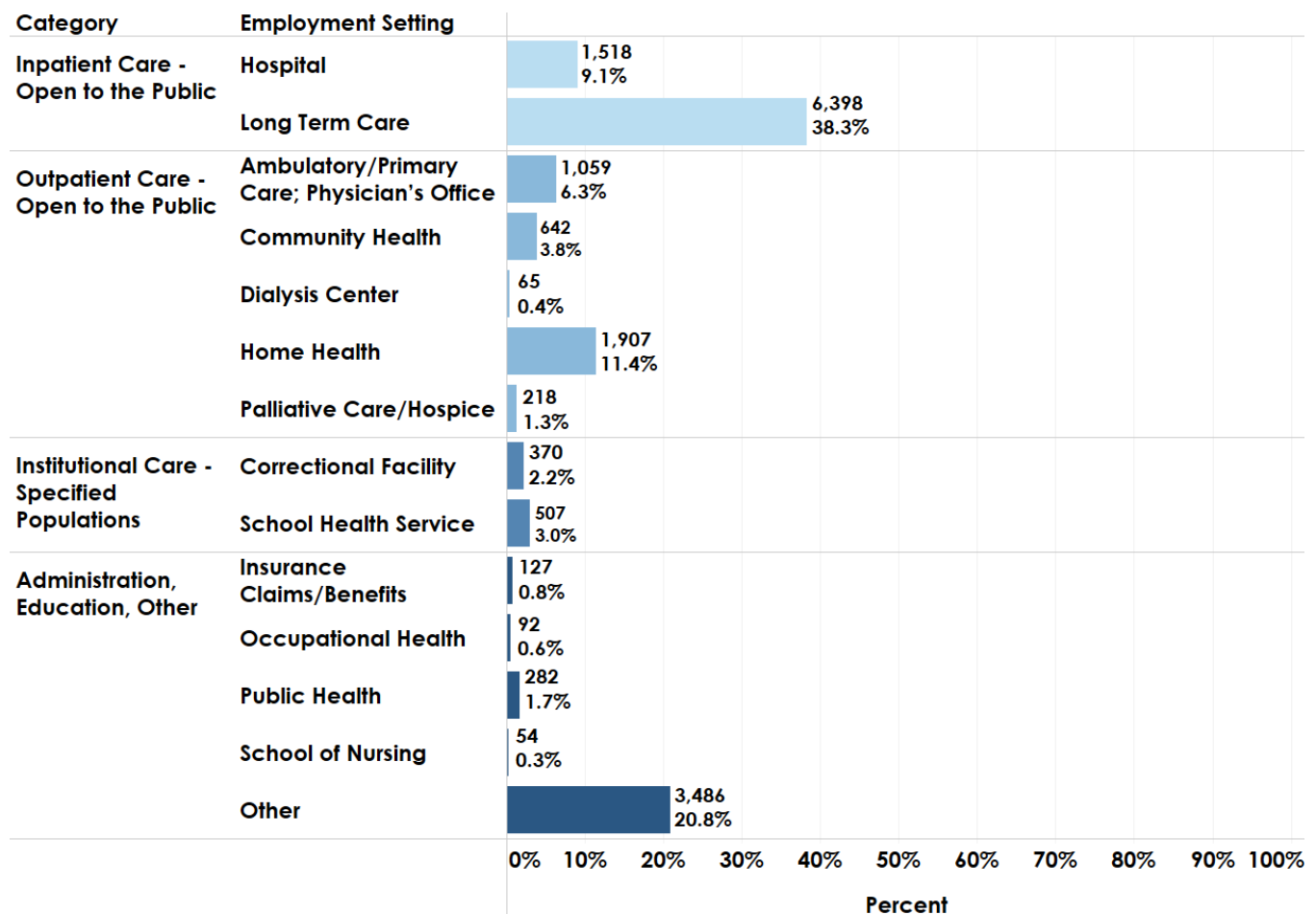
Figure 39. Percentage of LPNs, RNs, APRNs in Each Employment Setting



Note: Does not include nurses who did not report their employment setting (N=1,525), including 199 LPNs, 1,235 RNs, and 91 APRNs. Long Term Care includes nursing homes, extended care and assisted living facilities.

Over one-third of LPNs (38.3%) are working in long term care, including nursing homes, extended care, or assisted living facilities. The next largest group (20.8%) listed “Other” as their employment setting, offering little information about their actual work setting. According to the Missouri State Board of Nursing, common employment settings that comprise “Other” include private duty, camp, dental office, chiropractor office, government, rehabilitation programs or legal settings. Another substantial portion of LPNs (11.4%) work in home health (Figure 40).

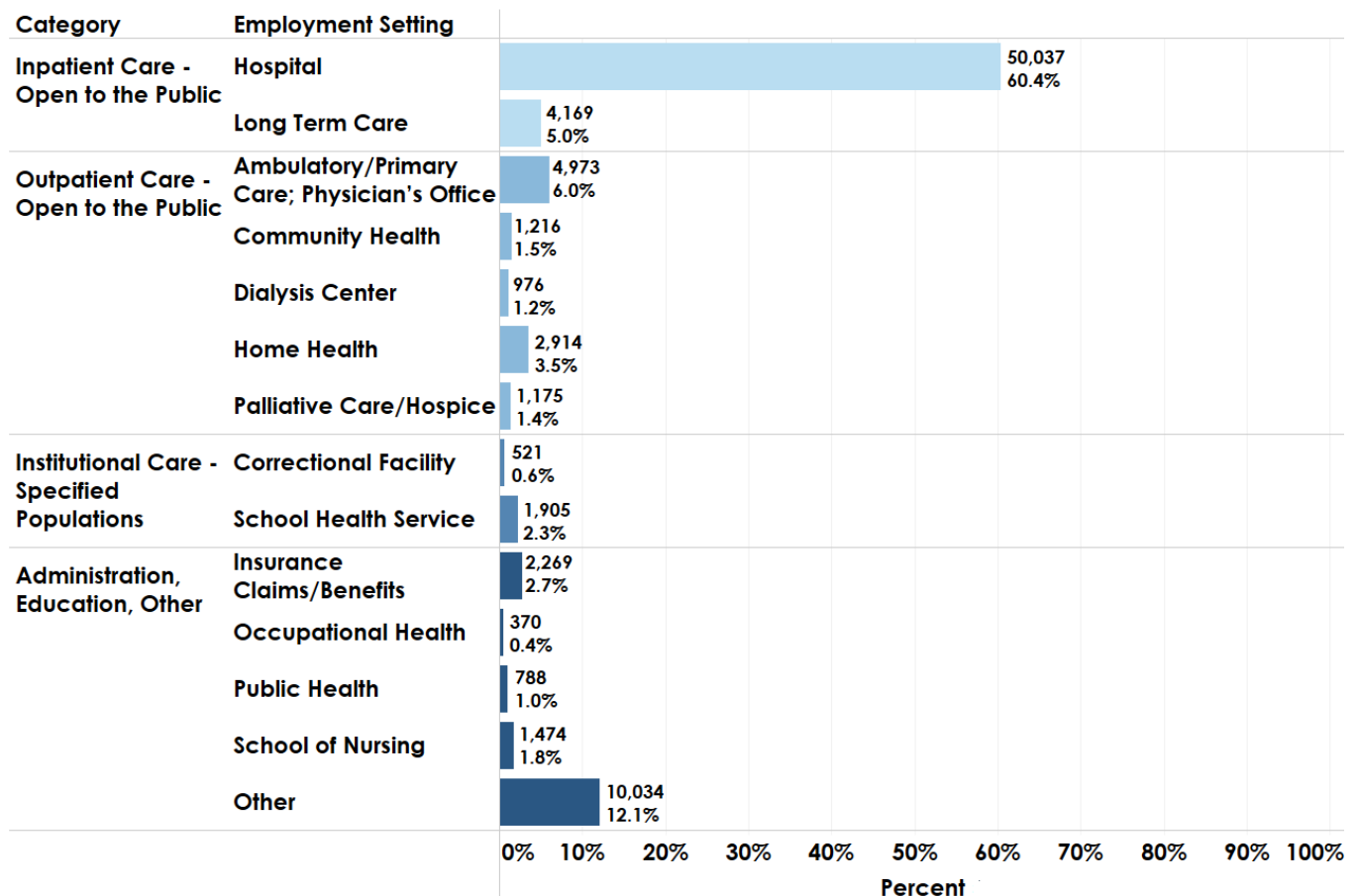
Figure 40. Number of LPNs in Each Employment Setting



Note: Does not include LPNs who did not report their employment setting (N=199). Long Term Care includes nursing homes, extended care and assisted living facilities.

Over half of the RNs (60.4%) work in hospitals. Little information is available for RNs who answer “Other,” though they comprise a significant portion of the RN workforce (12.1%). According to the Missouri State Board of Nursing, common employment settings that comprise “Other” include private duty, camp, dental office, chiropractor office, government, rehabilitation programs or legal settings (Figure 41).

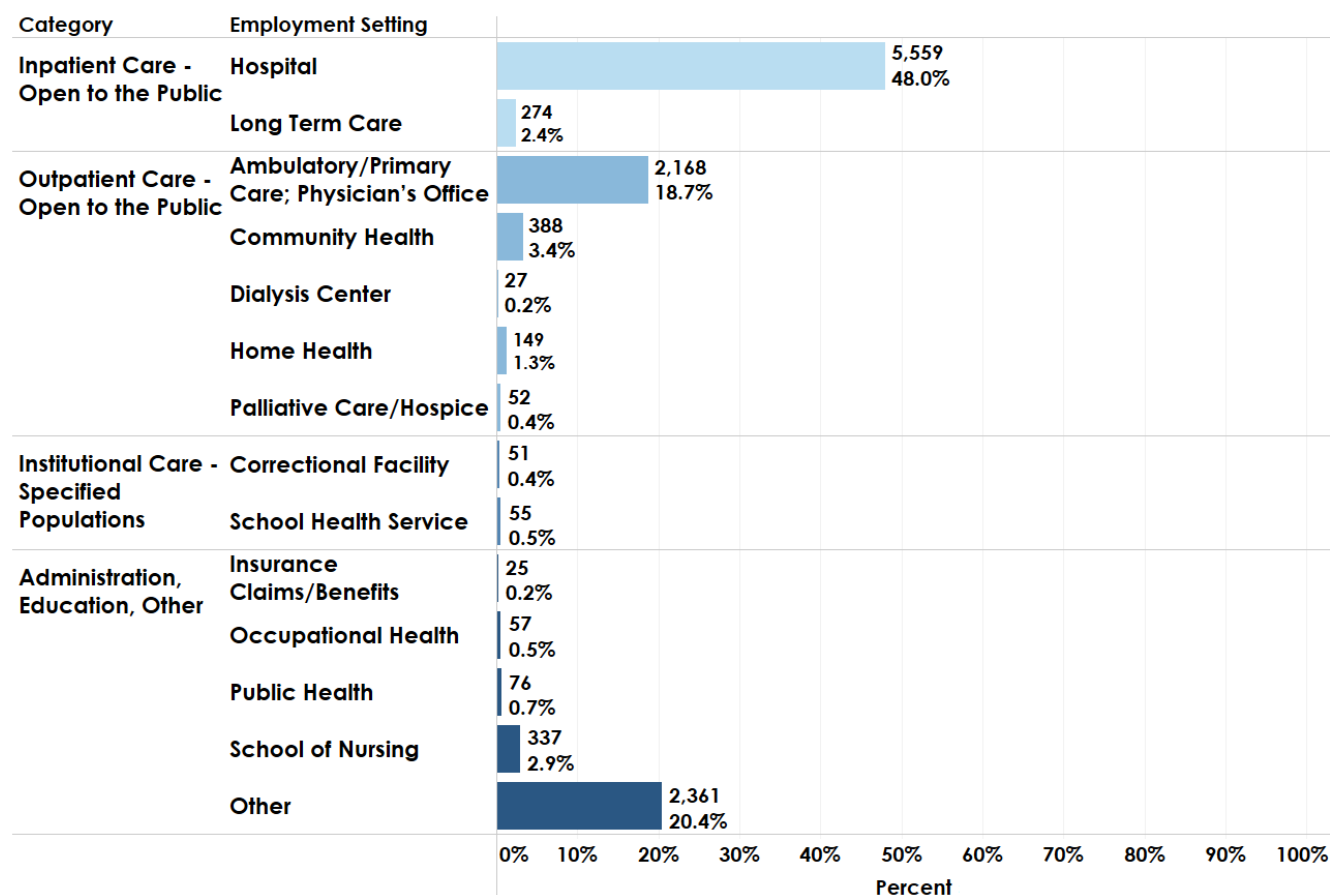
Figure 41. Number of RNs in Each Employment Setting



Note: Does not include RNs who did not report their employment setting (N=1,235). Long Term Care includes nursing homes, extended care and assisted living facilities.

Just under half of APRNs work in hospitals, with 48% reporting this as their primary setting. “Other” is the next highest category with one out of every five APRNs (20.4%). Unfortunately, very little information exists about their specific setting. According to the Missouri State Board of Nursing, common employment settings that comprise “Other” include private duty, camp, dental office, chiropractor office, government, rehabilitation programs or legal settings. Another important employment setting for APRNs is ambulatory care, including physician’s offices or primary care facilities, with 18.7% of APRNs listing this as the primary work setting (Figure 42).

Figure 42. Number of APRNs in Each Employment Setting



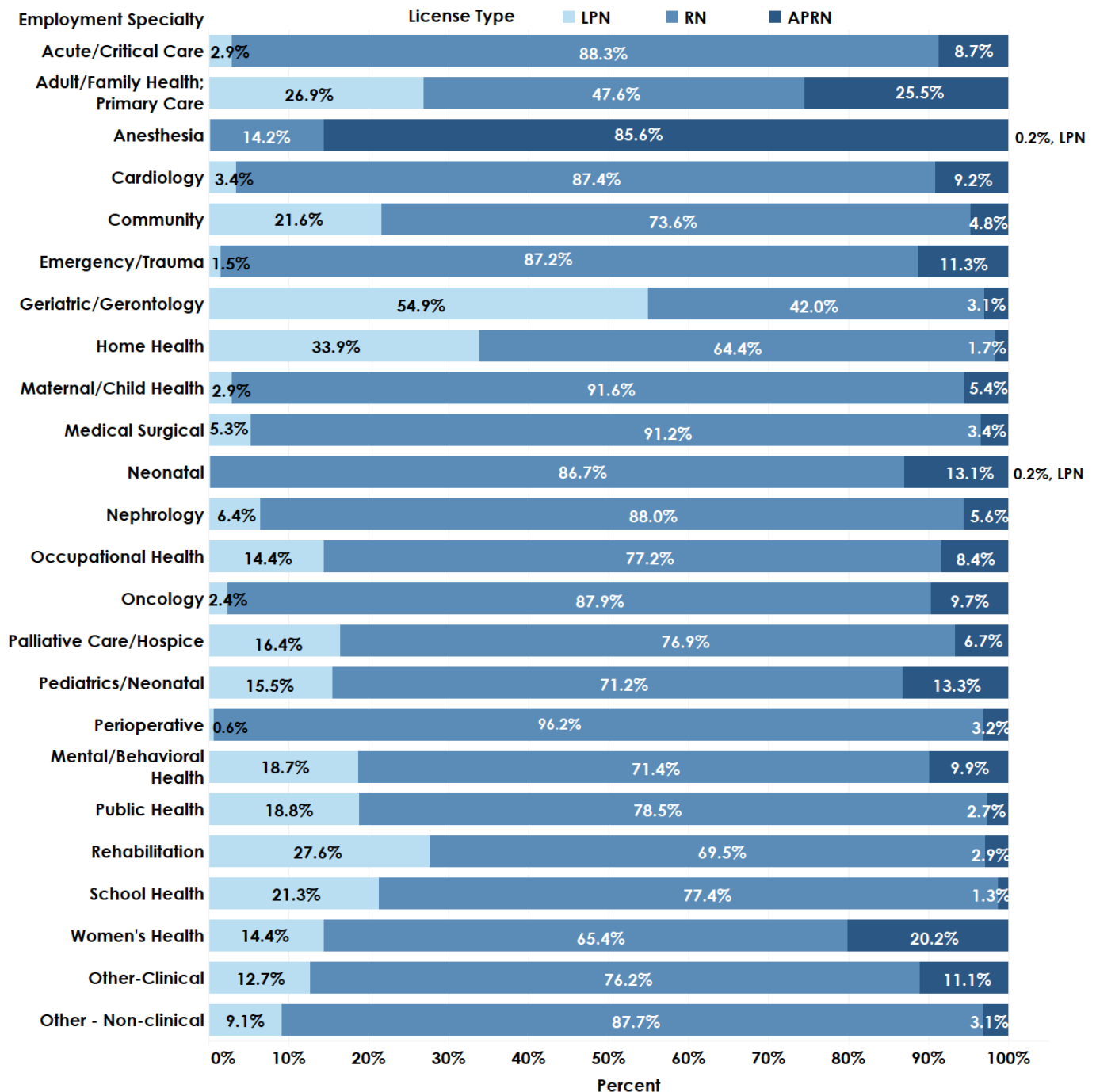
Note: Does not include APRNs who did not report their employment setting (N=91). Long Term Care includes nursing homes, extended care and assisted living facilities.

Employment Specialty

Employment specialty indicates the focus of a nurse’s practice in their primary nursing position. Nursing specialties in the Nursys® survey include a wide variety of clinical specialties like gerontology and pediatrics/neonatal, as well as practice settings like acute or critical care.

With few exceptions (noted below), RNs comprise the majority of nurses in all nursing specialties. The category which includes adult health, family health, and primary care includes substantial numbers of LPNs (26.9%), RNs (47.6%), and APRNs (25.5%). The majority of nurses specializing in geriatrics or gerontology are LPNs (54.9%) and the majority specializing in anesthesia are APRNs (85.6%) (Figure 43).

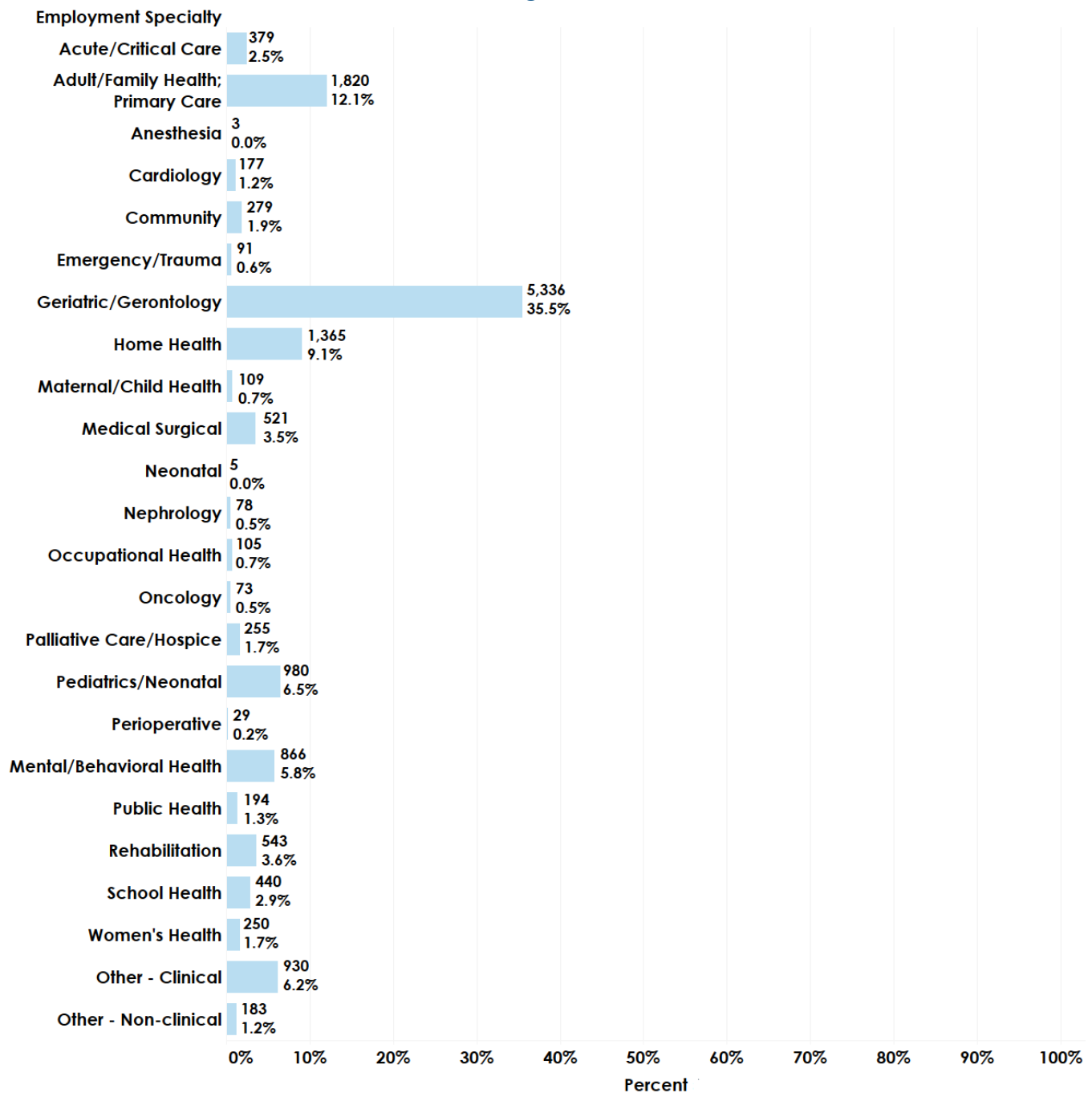
Figure 43. Employment Specialty of LPNs, RNs, APRNs That Most Closely Corresponds to Their Primary Nursing Position



Note: Does not include nurses who did not report their primary employment specialty (N=10,156), including 1,913 LPNs, 6,858 RNs, and 1,385 APRNs. Mental/Behavioral Health includes Psychiatric, Mental Health and Substance Abuse.

The largest percentage of LPNs (35.5%) specialize in geriatric/gerontology, which corresponds with their largest employment setting in nursing homes, extended care and assisted living facilities. Other prevalent specialties among LPNs include adult health, family health, and primary care (12.1%), and home health (9.1%) (Figure 44).

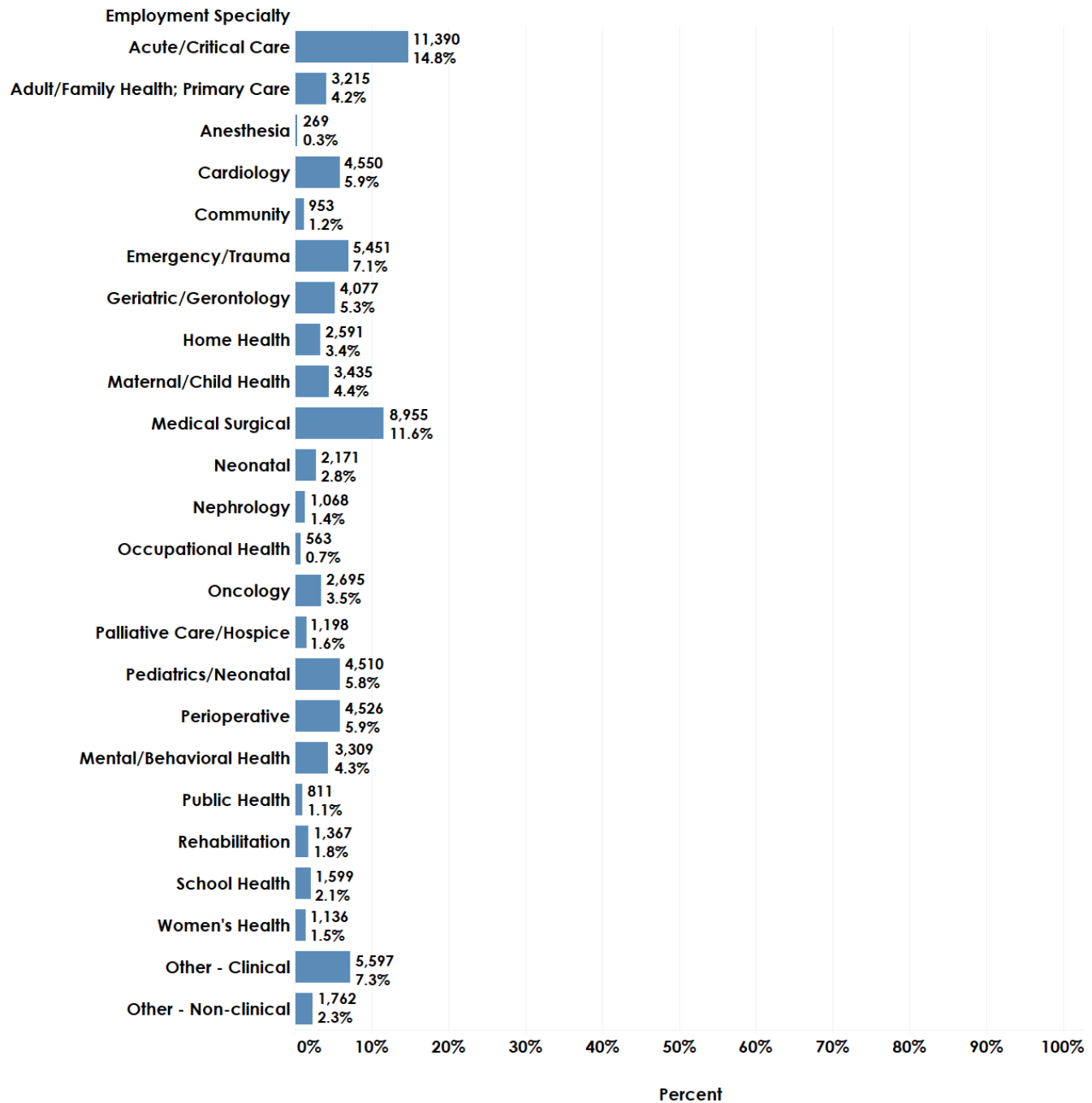
Figure 44. Employment Specialty of LPNs That Most Closely Corresponds to Their Primary Nursing Position



Note: Does not include LPNs who did not report their primary employment specialty (N=1,913).
Mental/Behavioral Health includes Psychiatric, Mental Health and Substance Abuse.

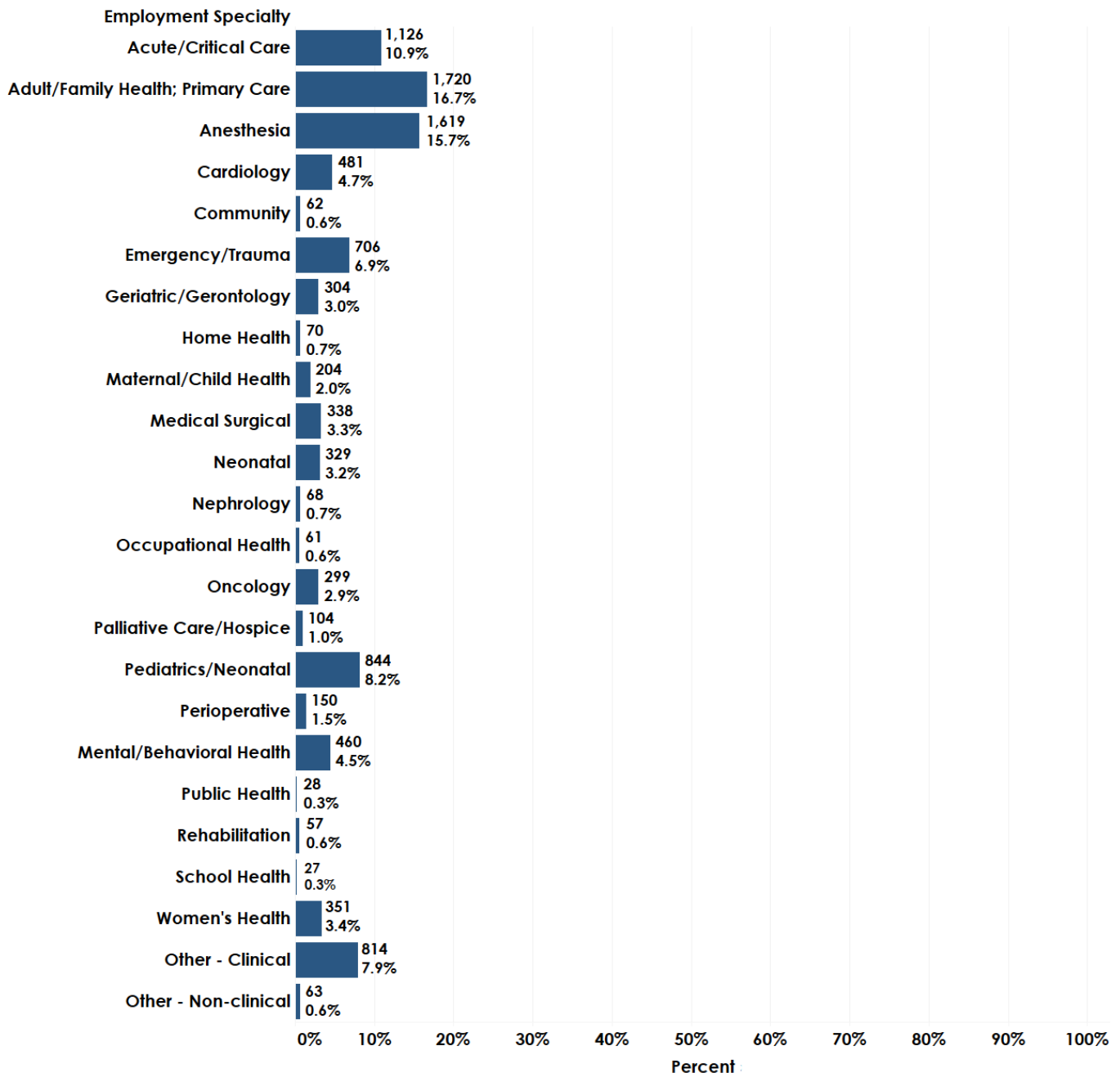
The largest number of RNs specialize in acute or critical care (14.0% or 10,106), which corresponds with their largest employment setting in hospitals. The second most commonly-held specialty for RNs is medical surgical (11.1% or 7,977).

Figure 45. Employment Specialty of RNs That Most Closely Corresponds to Their Primary Nursing Position



Over 40% of APRNs fall into one of three specialties, adult health, family health or primary care (16.7%), anesthesia (15.7%) or acute care or critical care (10.9%) (Figure 46).

Figure 46. Employment Specialty of APRNs That Most Closely Corresponds to Their Primary Nursing Position



Note: Does not include APRNs who did not report their primary employment specialty (N=1,385).
Mental/Behavioral Health includes Psychiatric, Mental Health and Substance Abuse.

Next Steps

The Missouri State Board of Nursing and the University of Missouri will continue to collaborate on providing information on the nursing workforce in Missouri. LPNs, RNs, and APRNs are required to enroll in Nursys® e-Notify and provide workforce information. Thus the 2020, and now the *2021 Missouri Nursing Workforce Report*, are the most comprehensive analyses of Missouri's nursing workforce to date.

Additional analyses are planned on age as well as commuting patterns for Missouri's nursing workforce.

In Missouri, policymakers need reliable data on nursing workforce supply and demand to make changes that will advance healthcare, improve Missouri's economic environment, and improve overall quality of life. It would be helpful to conduct similar analysis of additional health care professions to identify where health care provider shortages exist or have the potential to exist in the near future. Findings across all health care professions could be used to offer potential policy solutions to address current and projected gaps in care.

Data, charts and graphics included in this report will be available through the Missouri Health Care Workforce Project web application when it launches in 2022: www.MOhealthcareworkforce.org.

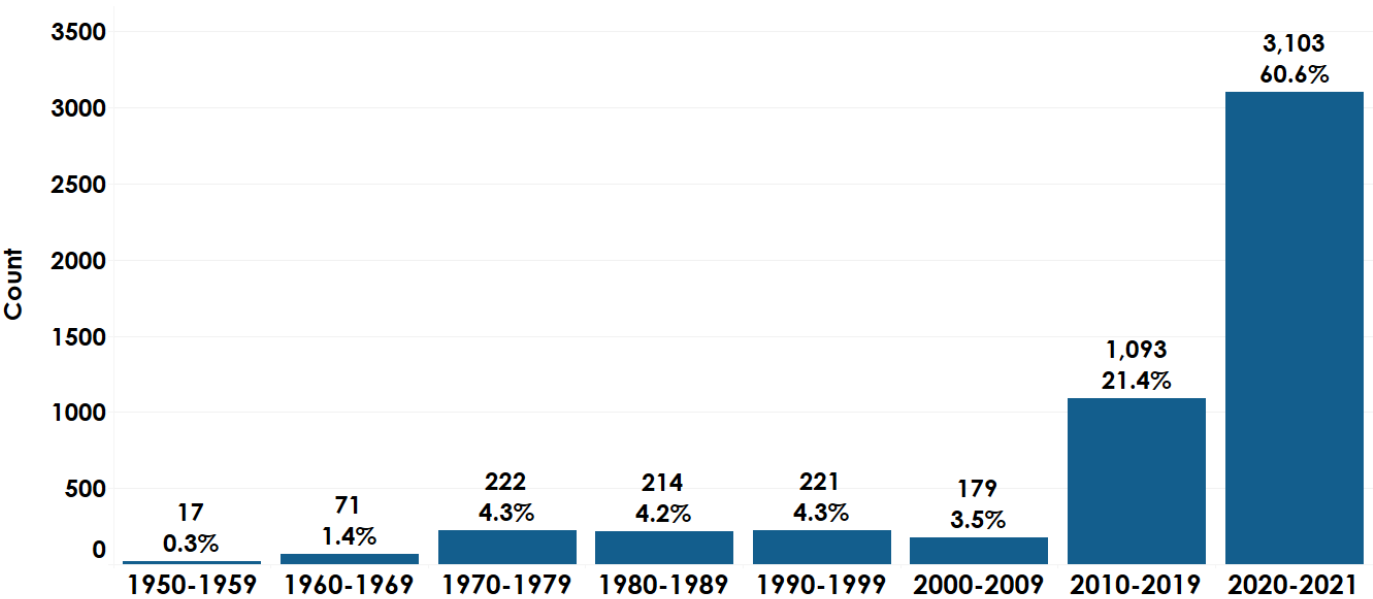
Appendix

Appendix 1: Nurses with Active Missouri License without Nursys® Enrollment

Because nurses enroll in Nursys e-Notify® at the time of license renewal, those with an active Missouri license but without Nursys® enrollment are primarily newly licensed. As seen in Figure 47 below, 60.6% or 3,103 of these nurses have an initial license year of 2020 or 2021, and an additional 21.4% or 1,093 were initially licensed in the prior decade.

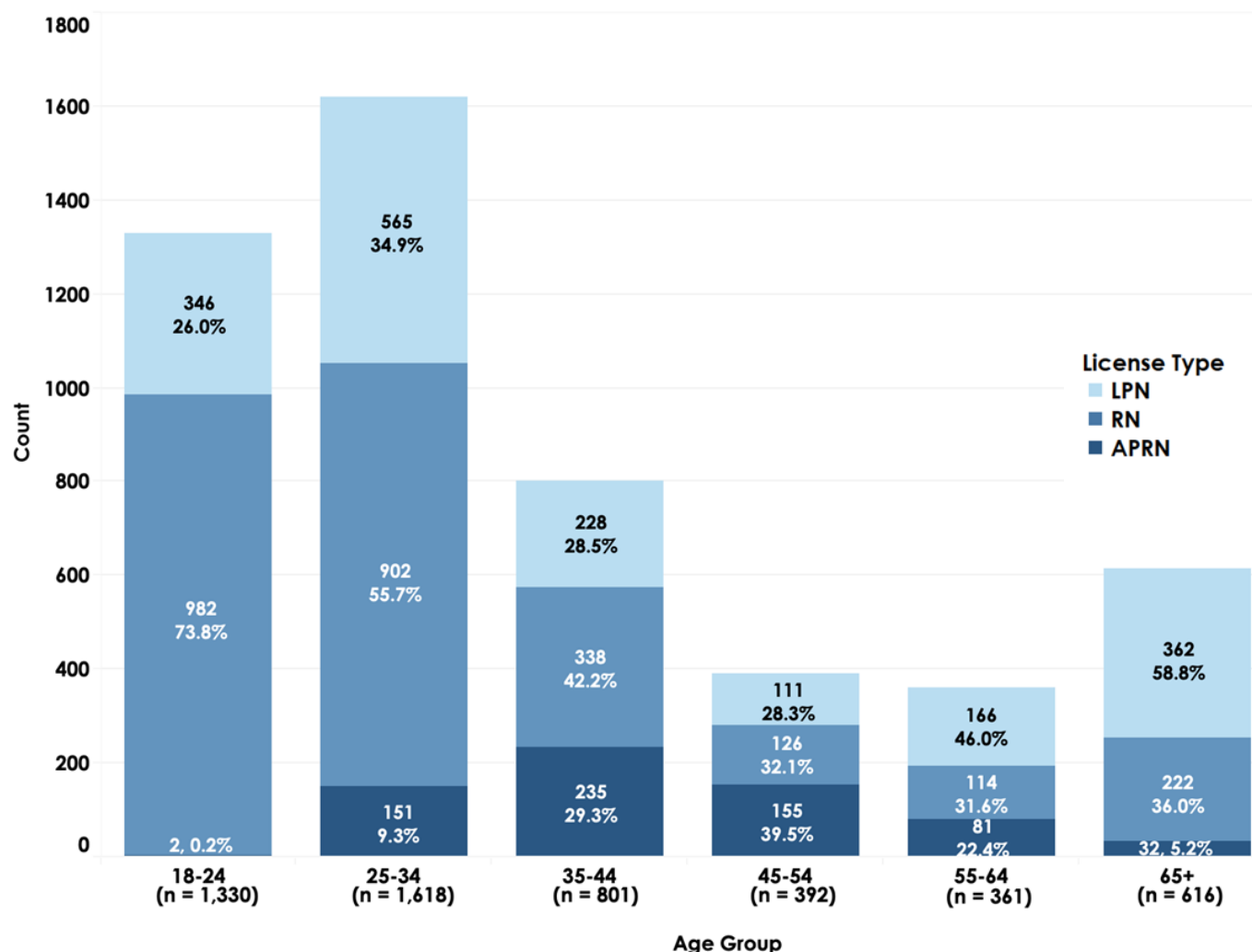
A small proportion of licensed nurses without Nursys® enrollment (18.0%; n=924) were initially licensed between 1950-2009. They are not enrolled in Nursys®, and likely renewed their license on paper.

Figure 47. Initial License Year of Nurses with Active Missouri License without Nursys® Enrollment



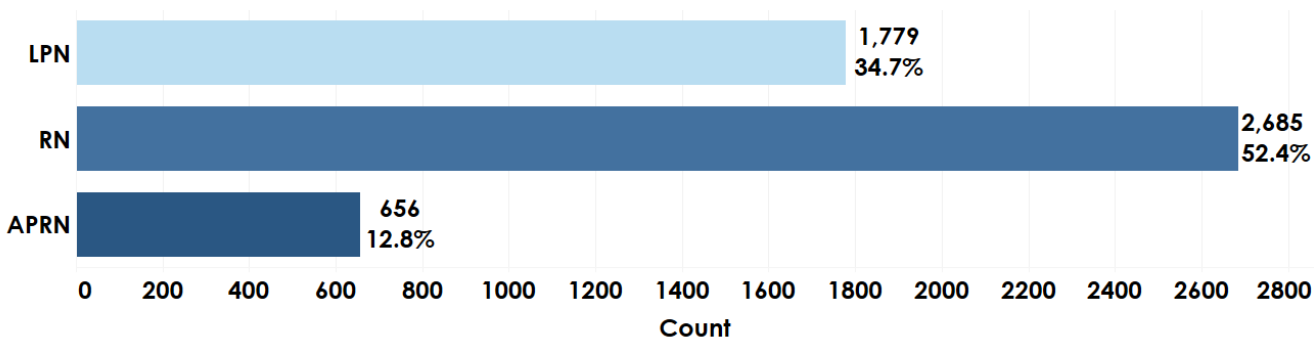
Licensed nurses without Nursys® enrollment tend to be concentrated in younger age groups, another indication that they are at the beginning of their nursing careers. Figure 48 below shows that the largest age cohort includes those age 25-34, with 1,618 nurses (565 LPNs, 902 RNs, and 151 APRNs). Encouragingly, the next largest age cohort includes those age 18-24, with 1,330 nurses, including 346 LPNs and 982 RNs.

Figure 48. Age of Nurses with Active Missouri License without Nursys® Enrollment



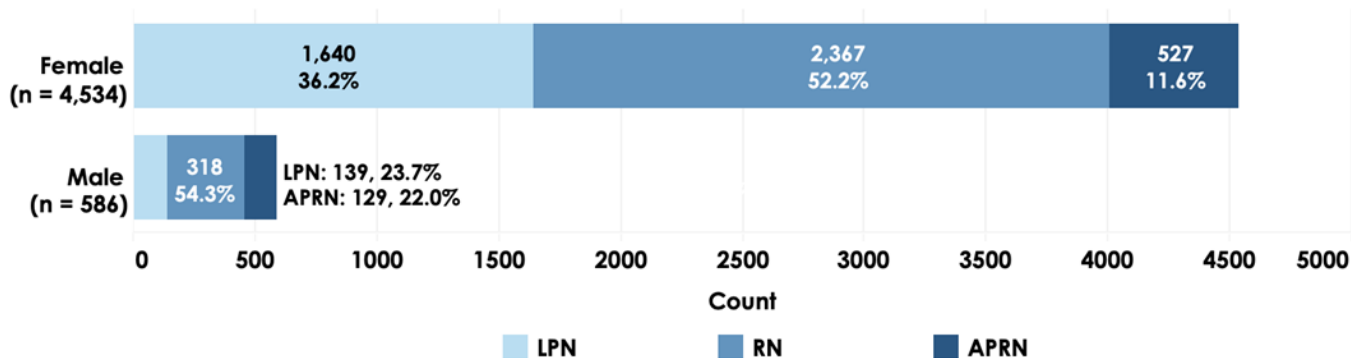
A relatively high proportion of nurses with an active Missouri license but without Nursys® enrollment are LPNs (34.7% or 1,779) or APRNs (12.8% or 656). Statewide, LPNs comprise 16.6% and APRNs 9.5% of the total population of licensed Missouri nurses. (See Figure 2 for comparisons.) This is likely due to the license renewal periods for LPNs versus RNs and APRNs. LPNs renewed their licenses in 2020, resulting in a larger window of time between their initial license and renewal dates. RNs and APRNs renewed during 2021. Thus, a higher proportion of newly licensed RNs have already renewed their license and enrolled in Nursys®.

Figure 49. License Type of Nurses with Active Missouri License without Nursys® Enrollment



While nurses with an active Missouri license but without Nursys® enrollment are slightly more often male than the full population of employed nurses, this group is still female-dominated. Figure 50 and the accompanying table show the gender distribution for LPNs (92.2% female), RNs (88.2% female) and APRNs (80.3% female) without Nursys enrollment compared to the full population of LPNs (93.9% female), RNs (90.9% female) and APRNs (87.2% female) who are employed or volunteering as a nurse. See Figure 23 for more information about gender among nurses with an active Missouri license who are working or volunteering as a nurse.

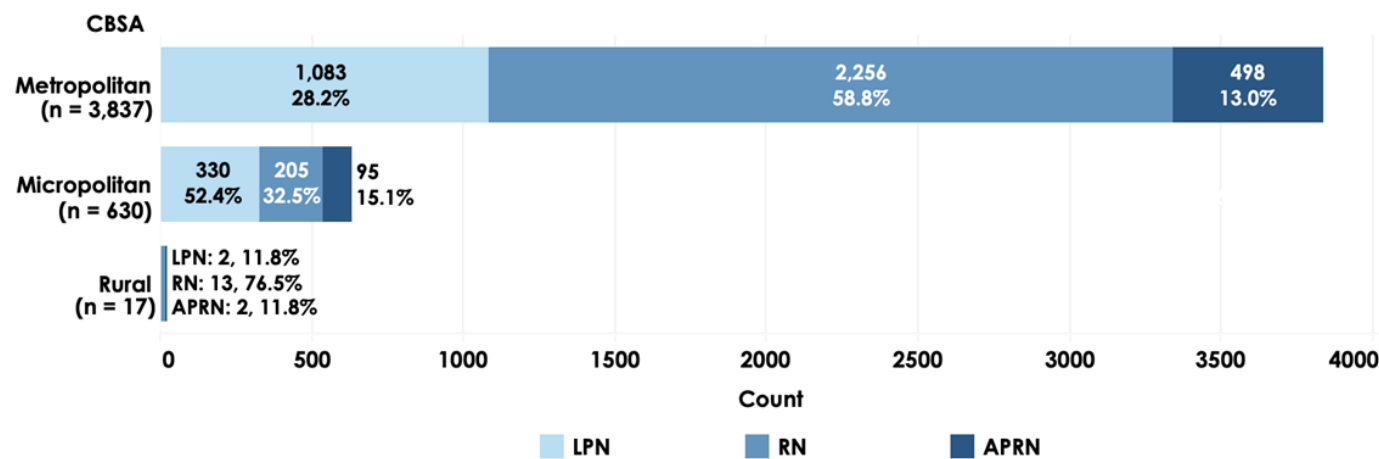
Figure 50. Gender of Nurses with Active Missouri License without Nursys® Enrollment



Gender of Nurses with Active Missouri License without Nursys® Enrollment								
	LPN	LPN %	RN	RN %	APRN	APRN %	Total	Total %
Female	1,640	92.2%	2,367	88.2%	527	80.3%	4,534	88.6%
Male	139	7.8%	318	11.8%	129	19.7%	586	11.4%
Total	1,779	100.0%	2,685	100.0%	656	100.0%	5,120	100.0%

Nearly three in four nurses with an active Missouri license but without Nursys® enrollment (74.9% or 3,837) reside in metropolitan counties, including 60.9% of LPNs, 84.0% of RNs, and 75.9% of APRNs. Nearly equal proportions live in micropolitan (12.3% or 630) or rural (12.4% or 636) counties. See Figure 51 and the table below for further details. By comparison, a higher proportion of those enrolled in Nursys® and who are actively employed or volunteering reside in metropolitan counties, including 63.1% of LPNs, 82.2% of RNs and 84.8% of APRNs. See Figure 13 for further information on this population.

Figure 51. Geography of Nurses with Active Missouri License without Nursys® Enrollment



County of Residence of Nurses with Active Missouri License without Nursys® Enrollment								
	LPN	LPN %	RN	RN %	APRN	APRN %	Total	Total %
Metropolitan	1,083	60.9%	2,256	84.0%	498	75.9%	3,837	74.9%
Micropolitan	330	18.5%	205	7.6%	95	14.5%	630	12.3%
Rural	364	20.5%	211	7.9%	61	9.3%	636	12.4%
NA	2	0.1%	13	0.5%	2	0.3%	17	0.3%
Total	1,779	100.0%	2,685	100.0%	656	100.0%	5,120	100.0%

Appendix 2: Number and Rate of Nurses by County of Employment

Number and Rate Per 10,000 of Nurses in Metropolitan Counties by County of Employment and Nurse Type

County of Employment	LPN		RN		APRN		All License Types ¹	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Metro Total	10,335	22.5	60,231	130.9	7,845	17.0	78,411	170.4
Andrew	23	13.0	38	21.5	2	1.1	63	35.6
Bates	57	35.2	111	68.6	9	5.6	177	109.4
Bollinger	12	9.9	23	19.0	2	1.6	37	30.5
Boone	756	41.9	3,440	190.6	406	22.5	4,602	255.0
Buchanan	426	48.8	1,243	142.3	149	17.1	1,818	208.1
Caldwell	19	21.1	30	33.3	2	2.2	51	56.5
Callaway	79	17.7	174	38.9	16	3.6	269	60.1
Cape Girardeau	330	41.8	1,531	194.1	275	34.9	2,136	270.8
Cass	225	21.3	441	41.7	49	4.6	715	67.6
Christian	114	12.9	285	32.2	48	5.4	447	50.5
Clay	461	18.4	2,749	110.0	270	10.8	3,480	139.2
Clinton	119	58.4	224	109.9	24	11.8	367	180.0
Cole	354	46.1	1,121	146.1	124	16.2	1,599	208.4
Cooper	47	26.5	64	36.1	6	3.4	117	66.1
Dallas	26	15.4	31	18.4	3	1.8	60	35.5
DeKalb	11	8.8	8	6.4	1	0.8	20	15.9
Franklin	260	25.0	843	81.1	107	10.3	1,210	116.4
Greene	901	30.7	5,406	184.5	633	21.6	6,940	236.8
Howard	15	15.0	48	48.0	5	5.0	68	68.0
Jackson	1,493	21.2	9,865	140.3	1,620	23.0	12,978	184.6
Jasper	377	31.1	1,809	149.1	231	19.0	2,417	199.2
Jefferson	216	9.6	908	40.3	120	5.3	1,244	55.3
Lafayette	125	38.2	126	38.5	22	6.7	273	83.5
Lincoln	66	11.2	172	29.1	24	4.1	262	44.4
Moniteau	32	19.8	40	24.8	3	1.9	75	46.5
Newton	39	6.7	144	24.7	22	3.8	205	35.2
Osage	23	16.9	22	16.2	3	2.2	48	35.3
Platte	173	16.6	602	57.7	80	7.7	855	81.9
Polk	105	32.7	354	110.1	48	14.9	507	157.7
Ray	68	29.5	86	37.4	5	2.2	159	69.1
St. Charles	524	13.0	3,013	74.9	358	8.9	3,895	96.9
St. Louis	2,214	22.3	16,013	161.1	1,818	18.3	20,045	201.6
St. Louis City	563	18.7	9,110	303.1	1,335	44.4	11,008	366.2
Warren	33	9.3	60	16.8	8	2.2	101	28.3
Webster	49	12.4	97	24.5	17	4.3	163	41.2

¹ Rate of LPNs, RNs and APRNs in each geography may not exactly add to Rate of All License Types due to rounding.

Number and Rate Per 10,000 of Nurses in Micropolitan Counties by County of Employment and Nurse Type

County of Employment	LPN		RN		APRN		All License Types ¹	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Micro Total	2,716	39.0	5,490	65.5	742	10.7	8,948	128.5
Adair	145	57.2	228	90.0	26	10.3	399	157.4
Audrain	132	52.0	162	63.8	17	6.7	311	122.5
Butler	228	53.7	615	144.8	100	23.5	943	222.0
Clark	9	13.2	22	32.4	1	1.5	32	47.1
Dunklin	125	42.9	103	35.4	23	7.9	251	86.2
Howell	218	54.3	451	112.4	55	13.7	724	180.5
Johnson	137	25.3	275	50.9	31	5.7	443	81.9
Laclede	70	19.6	191	53.5	22	6.2	283	79.2
Lewis	23	23.5	26	26.6	3	3.1	52	53.2
Marion	240	84.1	392	137.4	51	17.9	683	239.4
Nodaway	93	42.1	149	67.4	17	7.7	259	117.2
Pettis	174	41.1	315	74.4	34	8.0	523	123.5
Phelps	226	50.7	517	116.0	75	16.8	818	183.5
Pulaski	138	26.2	196	37.3	41	7.8	375	71.3
Ralls	13	12.6	12	11.6	1	1.0	26	25.2
Randolph	87	35.2	178	71.9	21	8.5	286	115.6
Ripley	23	17.3	38	28.6	9	6.8	70	52.7
Saline	127	55.8	158	69.4	22	9.7	307	134.9
Schuyler	7	15.0	13	27.9	1	2.1	21	45.1
Scott	199	52.0	352	92.0	60	15.7	611	159.6
St. Francois	204	30.4	675	100.4	83	12.3	962	143.1
Taney	98	17.5	422	75.5	49	8.8	569	101.7

Number and Rate Per 10,000 of Nurses in Rural Counties by County of Employment and Nurse Type

County of Employment	LPN		RN		APRN		All License Types ¹	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Rural Total	2,155	25.7	3,891	46.4	497	5.9	6,543	78.0
Atchison	25	48.6	39	75.8	5	9.7	69	134.2
Barry	48	13.4	192	53.6	24	6.7	264	73.8
Barton	17	14.5	58	49.3	10	8.5	85	72.3
Benton	56	28.8	50	25.7	5	2.6	111	57.1
Camden	120	25.9	451	97.4	51	11.0	622	134.3
Carroll	46	53.0	61	70.3	6	6.9	113	130.2
Carter	14	23.4	8	13.4	3	5.0	25	41.8
Cedar	31	21.6	62	43.2	10	7.0	103	71.8
Chariton	24	32.3	13	17.5	2	2.7	39	52.5
Crawford	28	11.7	31	13.0	7	2.9	66	27.6
Dade	18	23.8	26	34.4	2	2.6	46	60.8
Daviess	15	18.1	18	21.7	2	2.4	35	42.3
Dent	53	34.0	90	57.8	9	5.8	152	97.6
Douglas	12	9.1	34	25.8	9	6.8	55	41.7
Gasconade	65	44.2	55	37.4	10	6.8	130	88.4
Gentry	16	24.3	58	88.3	2	3.0	76	115.7
Grundy	40	40.6	88	89.3	11	11.2	139	141.1
Harrison	22	26.3	67	80.2	5	6.0	94	112.5
Henry	94	43.1	221	101.3	24	11.0	339	155.3
Hickory	14	14.7	22	23.1	3	3.1	39	40.9
Holt	16	36.3	19	43.2	1	2.3	36	81.8
Iron	32	31.6	54	53.3	7	6.9	93	91.9
Knox	5	12.6	16	40.4	2	5.1	23	58.1
Lawrence	66	17.2	144	37.5	22	5.7	232	60.5
Linn	39	32.7	75	62.9	7	5.9	121	101.5
Livingston	69	45.3	167	109.7	17	11.2	253	166.2
Macon	61	40.4	98	64.8	12	7.9	171	113.1
Madison	51	42.2	77	63.7	13	10.8	141	116.6
Maries	15	17.2	12	13.8	1	1.1	28	32.2
McDonald	19	8.3	21	9.2	6	2.6	46	20.1
Mercer	12	33.2	12	33.2	1	2.8	25	69.1
Miller	57	22.2	42	16.4	8	3.1	107	41.8
Mississippi	40	30.3	43	32.6	2	1.5	85	64.5
Monroe	30	34.7	20	23.1	2	2.3	52	60.2
Montgomery	47	40.7	30	26.0	5	4.3	82	71.0
Morgan	31	15.0	30	14.5	3	1.5	64	31.0
New Madrid	60	35.1	41	24.0	6	3.5	107	62.7
Oregon	12	11.4	20	19.0	2	1.9	34	32.3
Ozark	10	10.9	14	15.3	1	1.1	25	27.3
Pemiscot	73	46.2	67	42.4	11	7.0	151	95.5
Perry	44	23.0	144	75.3	14	7.3	202	105.6
Pike	75	41.0	102	55.7	10	5.5	187	102.2

Number and Rate Per 10,000 of Nurses in Rural Counties by County of Employment and Nurse Type, Continued

County of Employment	LPN		RN		APRN		All License Types ¹	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Putnam	12	25.6	18	38.3	3	6.4	33	70.3
Reynolds	16	25.5	21	33.5	1	1.6	38	60.6
Scotland	23	46.9	43	87.7	7	14.3	73	148.9
Shannon	17	20.8	20	24.5	3	3.7	40	49.0
Shelby	21	35.4	23	38.8	2	3.4	46	77.6
St. Clair	23	24.5	34	36.2	7	7.4	64	68.1
Ste. Genevieve	31	17.3	109	60.9	19	10.6	159	88.9
Stoddard	112	38.6	144	49.6	22	7.6	278	95.8
Stone	24	7.5	36	11.3	8	2.5	68	21.3
Sullivan	26	42.7	38	62.4	4	6.6	68	111.7
Texas	64	25.2	129	50.8	10	3.9	203	79.9
Vernon	66	32.1	193	93.9	20	9.7	279	135.7
Washington	35	14.2	104	42.1	15	6.1	154	62.3
Wayne	28	21.8	24	18.6	7	5.4	59	45.8
Worth	7	34.8	4	19.9	1	5.0	12	59.6
Wright	28	15.3	59	32.3	15	8.2	102	55.8

¹ Rate of LPNs, RNs and APRNs in each geography may not exactly add to Rate of All Nurses due to rounding.

Appendix 3: Number and Rate of Nurses by County of Residence

Number and Rate Per 10,000 of Nurses in Metropolitan Counties by County of Residence and Nurse Type

County of Employment	LPN		RN		APRN		All License Types ¹	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Metro Total	9,662	21.0	56,369	122.5	7,266	17.0	73,297	159.2
Andrew	69	39.0	200	112.9	11	6.2	280	35.6
Bates	91	56.3	137	84.7	13	8.0	241	109.4
Bollinger	39	32.1	104	85.7	16	13.2	159	30.5
Boone	479	26.5	2,627	145.6	349	19.3	3455	255.0
Buchanan	342	39.1	1,027	117.6	111	12.7	1480	208.1
Caldwell	42	46.6	113	125.3	4	4.4	159	56.5
Callaway	164	36.7	444	99.2	28	6.3	636	60.1
Cape Girardeau	219	27.8	1,196	151.6	230	29.2	1645	270.8
Cass	341	32.2	1,161	109.8	122	11.5	1624	67.6
Christian	222	25.1	1,379	155.7	222	25.1	1823	50.5
Clay	544	21.8	3,746	149.9	386	15.4	4676	139.2
Clinton	104	51.0	285	139.8	26	12.8	415	180.0
Cole	215	28.0	831	108.3	95	12.4	1141	208.4
Cooper	85	48.0	184	103.9	20	11.3	289	66.1
Dallas	44	26.1	163	96.6	7	4.1	214	35.5
DeKalb	39	31.1	94	74.9	15	12.0	148	15.9
Franklin	355	34.1	1,269	122.1	139	13.4	1763	116.4
Greene	545	18.6	3,496	119.3	439	15.0	4480	236.8
Howard	33	33.0	124	124.0	4	4.0	161	68.0
Jackson	1267	18.0	7,104	101.1	975	13.9	9346	184.6
Jasper	327	27.0	1,448	119.3	209	17.2	1984	199.2
Jefferson	417	18.5	2,788	123.9	257	11.4	3462	55.3
Lafayette	184	56.3	334	102.1	41	12.5	559	83.5
Lincoln	164	27.8	625	105.9	50	8.5	839	44.4
Moniteau	51	31.6	108	66.9	11	6.8	170	46.5
Newton	93	16.0	434	74.5	37	6.4	564	35.2
Osage	46	33.8	137	100.6	9	6.6	192	35.3
Platte	182	17.4	1,389	133.0	238	22.8	1809	81.9
Polk	83	25.8	391	121.6	46	14.3	520	157.7
Ray	86	37.4	217	94.3	19	8.3	322	69.1
St. Charles	580	14.4	6,422	159.7	791	19.7	7793	96.9
St. Louis	1631	16.4	12,835	129.1	1,882	18.9	16348	201.6
St. Louis City	407	13.5	2,695	89.7	354	11.8	3456	366.2
Warren	76	21.3	362	101.5	29	8.1	467	28.3
Webster	96	24.2	500	126.3	81	20.5	677	41.2

Number and Rate Per 10,000 of Nurses in Micropolitan Counties by County of Residence and Nurse Type

County of Employment	LPN		RN		APRN		All License Types ¹	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Micro Total	111	43.8	213	84.0	23	9.1	347	136.9
Adair	142	55.9	206	81.1	15	5.9	363	143.0
Audrain	155	36.5	382	89.9	72	16.9	609	143.4
Butler	31	45.6	70	103.0	4	5.9	105	154.5
Clark	155	53.2	181	62.1	19	6.5	355	121.9
Dunklin	180	44.9	437	108.9	59	14.7	676	168.5
Howell	174	32.2	376	69.5	37	6.8	587	108.6
Johnson	116	32.5	232	64.9	31	8.7	379	106.1
Laclede	41	41.9	83	84.9	10	10.2	134	137.1
Lewis	180	63.1	302	105.9	40	14.0	522	183.0
Marion	98	44.4	203	91.9	20	9.1	321	145.3
Nodaway	194	45.8	354	83.6	35	8.3	583	137.7
Pettis	175	39.3	403	90.4	61	13.7	639	143.4
Phelps	186	35.4	327	62.2	26	4.9	539	102.5
Pulaski	50	48.5	72	69.8	5	4.9	127	123.2
Ralls	110	44.4	289	116.8	26	10.5	425	171.7
Randolph	53	39.9	128	96.3	23	17.3	204	153.5
Ripley	179	78.6	150	65.9	20	8.8	349	153.3
Saline	27	57.9	42	90.1	7	15.0	76	163.1
Schuyler	215	56.2	523	136.6	71	18.5	809	211.3
Scott	201	29.9	768	114.3	106	15.8	1075	159.9
St. Francois	117	20.9	393	70.3	31	5.5	541	96.7
Taney	111	43.8	213	84.0	23	9.1	347	136.9

Number and Rate Per 10,000 of Nurses in Rural Counties by County of Residence and Nurse Type

County of Employment	LPN		RN		APRN		All License Types ¹	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Rural Total	3,142	37.5	7,031	83.9	695	8.3	10,868	129.6
Atchison	32	62.2	50	97.2	7	13.6	89	173.1
Barry	35	9.8	264	73.8	19	5.3	318	88.9
Barton	36	30.6	76	64.7	10	8.5	122	103.8
Benton	80	41.1	139	71.5	16	8.2	235	120.9
Camden	100	21.6	453	97.8	55	11.9	608	131.3
Carroll	65	74.9	80	92.2	5	5.8	150	172.8
Carter	33	55.2	54	90.3	12	20.1	99	165.5
Cedar	66	46.0	121	84.3	11	7.7	198	138.0
Chariton	47	63.3	60	80.8	5	6.7	112	150.8
Crawford	67	28.0	137	57.3	16	6.7	220	92.0
Dade	16	21.2	60	79.4	3	4.0	79	104.5
Daviess	30	36.2	86	103.9	4	4.8	120	145.0
Dent	83	53.3	131	84.1	17	10.9	231	148.3
Douglas	21	15.9	68	51.6	10	7.6	99	75.1
Gasconade	92	62.6	147	100.0	17	11.6	256	174.1
Gentry	34	51.7	95	144.6	4	6.1	133	202.4
Grundy	40	40.6	91	92.4	10	10.2	141	143.1
Harrison	45	53.9	118	141.3	7	8.4	170	203.5
Henry	135	61.9	196	89.8	17	7.8	348	159.5
Hickory	31	32.5	74	77.5	6	6.3	111	116.3
Holt	27	61.3	49	111.3	5	11.4	81	184.0
Iron	36	35.6	78	77.0	9	8.9	123	121.5
Knox	22	55.6	34	85.9	3	7.6	59	149.0
Lawrence	92	24.0	307	80.0	24	6.3	423	110.3
Linn	56	47.0	139	116.6	12	10.1	207	173.7
Livingston	54	35.5	160	105.1	16	10.5	230	151.0
Macon	82	54.2	155	102.5	16	10.6	253	167.4
Madison	48	39.7	127	105.1	11	9.1	186	153.9
Maries	27	31.0	70	80.5	6	6.9	103	118.4
McDonald	38	16.6	117	51.2	13	5.7	168	73.6
Mercer	17	47.0	23	63.6	4	11.1	44	121.6
Miller	85	33.2	175	68.3	20	7.8	280	109.3
Mississippi	66	50.1	72	54.6	4	3.0	142	107.7
Monroe	61	70.6	86	99.5	5	5.8	152	175.8
Montgomery	76	65.8	128	110.8	8	6.9	212	183.5
Morgan	69	33.5	126	61.1	8	3.9	203	98.4
New Madrid	88	51.5	108	63.2	16	9.4	212	124.2
Oregon	45	42.7	73	69.3	8	7.6	126	119.7
Ozark	36	39.2	115	125.4	5	5.5	156	170.0
Pemiscot	68	43.0	93	58.8	7	4.4	168	106.3
Perry	58	30.3	227	118.6	21	11.0	306	159.9
Pike	97	53.0	155	84.7	12	6.6	264	144.2

Number and Rate Per 10,000 of Nurses in Rural Counties by County of Residence and Nurse Type, Continued

County of Employment	LPN		RN		APRN		All License Types ¹	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Putnam	21	44.7	53	112.9	4	8.5	78	166.1
Reynolds	25	39.9	34	54.2	2	3.2	61	97.3
Scotland	25	51.0	43	87.7	3	6.1	71	144.8
Shannon	43	52.7	51	62.5	3	3.7	97	118.8
Shelby	34	57.3	62	104.6	7	11.8	103	173.7
St. Clair	33	35.1	75	79.8	11	11.7	119	126.6
Ste. Genevieve	31	17.3	200	111.8	26	14.5	257	143.6
Stoddard	150	51.7	268	92.3	27	9.3	445	153.3
Stone	60	18.8	232	72.6	23	7.2	315	98.6
Sullivan	25	41.1	56	92.0	5	8.2	86	141.2
Texas	108	42.5	206	81.1	19	7.5	333	131.1
Vernon	58	28.2	212	103.1	22	10.7	292	142.0
Washington	58	23.5	154	62.3	19	7.7	231	93.4
Wayne	62	48.2	108	83.9	21	16.3	191	148.4
Worth	19	94.4	24	119.2	4	19.9	47	233.5
Wright	54	29.5	136	74.4	15	8.2	205	112.1

¹ Rate of LPNs, RNs and APRNs in each geography may not exactly add to Rate of All Nurses due to rounding.

Appendix 4: Nursys® Renewal Application MDS Nurse Supply Workforce Survey

Renewal Application MDS Nurse Supply Workforce Survey Questions

Instructions for Collecting the Minimum Dataset

This document is intended to guide states in assembling the standardized nurse supply dataset. It is recommended that states collect the Minimum Nurse Supply Dataset at renewal from all licensed nurses in the state. This design generates a complete set of updated data for an individual nurse every time his or her license is renewed.

This Minimum Nurse Supply Dataset is intended to be a data standardization model and in no way is meant to limit data collection in your state.

Essential Elements

The National Forum's Research Committee identified the following 6 variables as being the most essential data elements a state could collect. These variables are already being collected by a majority of states and standardizing the collection of these elements among all states would be the most paramount to workforce analyses.

- Variable 1: Gender
- Variable 2: Ethnicity
- Variable 3: Race
- Variable 4: Year of birth
- Variable 6: Highest level of nursing education
- Variable 12: Employment status
- Variable 17: Employer's zip code

General Rules

1. When applicable and based on the board discretion additional selection can be added. Any additional responses will be mapped to "Other" when sent/added to the National Nurse Workforce Repository.
2. If any of the variables can be derived without asking the participant, then the question is not required to be asked/presented in the survey.
3. This question implies to the jurisdiction presenting the survey or for the jurisdiction this survey is intended for.
4. Some notes are specific to boards that have already implemented the MDS and currently participate in the National Nurse Workforce Repository.

Demographics

Variable 1: Gender

Stem (example): Gender

Note: General rule 2 applies here

Response Categories:

Female = F

Male = M

Non Binary / X - (Optional) = X

Variable 2: Ethnicity

Stem (example): Are you of Hispanic or Latino origin?

Note: General Rule 2 applies here

Response Categories:

Yes = X

No = Blank

Variable 3: Race

Stem (example): What is your race? (Mark all that apply)

Note: General rule 1 & 2 applies here

Response Categories:

American Indian or Alaska Native

Asian

Black/African American

Native Hawaiian or Other Pacific Islander

White/Caucasian

Other

Variable 4: Year of birth

Stem (example): In what year were you born?

Note: General rule 2 applies here

Response Categories: Open ended field or drop-down menu

Variable 5: Entry level education

Stem (example): What type of nursing degree/credential qualified you for your first U.S. nursing license?

Response Categories:

Vocational/Practical certificate-nursing
Diploma-nursing
Associate degree-nursing

Baccalaureate degree-nursing
Master’s degree-nursing
Doctoral degree-nursing (PhD)
Doctoral degree-nursing (DNP)

Variable 6: Highest level of nursing education

Stem (example): What is your highest level of nursing education?

Response Categories:

Vocational/Practical certificate-Nursing
Diploma Nursing
Associate degree-Nursing
Baccalaureate degree-Nursing

Master’s degree-Nursing
Doctoral degree-Nursing (PhD)
Doctoral degree-Nursing Practice (DNP)
Doctoral degree-Nursing other

Variable 7: Highest level of education in another field

Stem (example): What is your highest level of non-nursing education?

Response Categories:

Associate degree-Non nursing
Baccalaureate degree-Non-nursing
Master’s degree-Non-nursing
Doctoral degree-Non-nursing
Not applicable

License/Certification Information

Variable 8: License type

Stem (example): What type of license do you currently hold ? (Mark all that apply.)

Response Categories:

PN=PN

RN = RN

APRN = (NA , NM, NS, NP)

APRN-CRNA = NA

APRN-CNM = NM

APRN-CNS = NS

APRN-CNP = NP

Variable 9: Year of Initial licensure

Stem (example): Year of initial U.S. licensure

Note: General rule 2 & 3 applies here

Minimum Response Categories: Open-ended field or drop-down menu

Variable 10: Country of Initial RN/PN licensure

Stem (example): In what country were you initially licensed RN/PN?

Minimum Response Categories: Open-ended field or drop-down menu

Variable 11: License status

Stem (example): What is the status of your RN / PN license currently held?

Note: General rule 2 & 3 apply here

Response Categories:

Active = 1

Not Active = 0

Variable 12: Advanced Practice Registered Nurse License/Certification

Stem (example): Indicate whether you are credentialed to practice as an Active APRN as any of the following: (Select all that apply.)

Note: General rule 2 & 3 applies here

Response Categories:

Certified Nurse Practitioner
Clinical Nurse Specialist
Certified Registered Nurse Anesthetist
Certified Nurse Midwife
Not credentialed as any of the above

Employment Information

Variable 13: Employment status

Stem (example): What is your employment status? (Mark all that apply)

Response Categories:

Actively employed in nursing or in a position that requires a nurse license full-time
Actively employed in nursing or in a position that requires a nurse license part-time
Actively employed in nursing or in a position that requires a nurse license on a per-diem basis
Actively employed in a field other than nursing full-time
Actively employed in a field other than nursing part-time
Actively employed in a field other than nursing on a per-diem basis
Working in nursing only as a volunteer
Unemployed, seeking work as a nurse
Unemployed, not seeking work as a nurse
Retired

Variable 14: Reason for being unemployed

Note: General rule 1 applies here

Stem (example): If unemployed, please indicate the reasons.

Response Categories:

Taking care of home and family	School
Disabled	Difficulty in finding a nursing position
Inadequate Salary	Other

Variables 15-19 intended only if individual is actively employed in nursing

Variable 15: Number of positions employed in

Stem (example): In how many positions are you currently employed as a nurse?

Response Categories: 1, 2, 3 or more

Variable 16: Hours worked per week

Stem (example): How many hours do you work during a typical week in all your nursing positions?

Response Categories: Open-ended field or drop-down menu

Variable 17: Employer's address

Stem (example): Please indicate the state and zip code of your primary RN/PN employer

Response Categories: Open-ended field or drop-down menu

It is recommended that information for both primary and secondary positions be collected for variables 18-20.

Variable 18: Employment Setting*

Stem (example): Please identify the type of setting that most closely corresponds to your RN/PN nursing practice position.

Note: General rule 1, 3 & 4 applies here

Assisted Living Facility is separated from Nursing Home/Extended (General Rule: 4)

Academic Setting is renamed to School of Nursing (General Rule: 4)

Response Categories:

Hospital

Nursing Home/Extended Care

Assisted Living Facility

Home Health

Hospice

Correctional Facility

School of Nursing

Public Health

Dialysis Center

Community Health

School Health Service

Occupational Health

Ambulatory Care Setting

Insurance Claims/Benefits

Policy/Planning/Regulatory/Licensing Agency

Other (Please specify)

Variable 19: Employment Position*

Stem (example): Please identify the position title that most closely corresponds to your RN/PN nursing practice position.

Note: General rule 1, 3 & 4 applies here

Response Categories:

Consultant	Advanced Practice Registered Nurse
Nurse Researcher	Staff Nurse
Nurse Executive	Case Manager
Nurse Manager	Other-Health Related (Please specify)
Nurse Faculty/Educator	
Other-Not Health Related (Please specify)	

Variable 20: Employment Specialty*

Stem (example): Please identify the employment specialty that most closely corresponds to your RN/PN nursing practice position.

Note: General rule 1, 3 & 4 applies here

Family Health is separated from Adult Health (General Rule: 4)

Neonatal is separated from Pediatrics (General Rule: 4)

Response Categories:

Acute care/Critical Care	Oncology
Adult Health	Palliative Care/Hospice
Family Health	Pediatrics
Anesthesia	Neonatal
Cardiology	Perioperative
Community	Public Health
Geriatric/Gerontology	Psychiatric/Mental Health/Substance Abuse
Home Health	Rehabilitation
Maternal-Child Health/Obstetrics	School Health
Medical Surgical	Emergency/Trauma
Nephrology	Women's Health
Occupational health	Other-Clinical specialties (Please specify)
Other-Non-clinical specialties (Please specify)	

Variable 21: Secondary Employment Setting*

Stem (example): Please identify the type of setting that most closely corresponds to your secondary nursing practice position.

Note: General rule 1, 3 & 4 applies here

Assisted Living Facility is separated from Nursing Home/Extended (General Rule: 4)

Academic Setting is renamed to School of Nursing (General Rule: 4)

Response Categories:

Hospital

Nursing Home/Extended Care

Assisted Living Facility

Home Health

Hospice

Correctional Facility

School of Nursing

Public Health

Dialysis Center

Community Health

School Health Service

Occupational Health

Ambulatory Care Setting

Insurance Claims/Benefits

Policy/Planning/Regulatory/Licensing Agency

Other (Please specify)

No Secondary Employment Setting

Variable 22: Secondary Employment Position*

Stem (example): Please identify the position title that most closely corresponds to your secondary nursing practice position.

Note: General rule 1, 3 & 4 applies here

Response Categories:

Consultant

Nurse Researcher

Nurse Executive

Nurse Manager

Nurse Faculty/Educator

Other-Not Health Related (Please specify)

No Secondary Practice Position

Advanced Practice Registered Nurse

Staff Nurse

Case Manager

Other-Health Related (Please specify)

Variable 23: Secondary Employment Specialty*

Stem (example): Please identify the employment specialty that most closely corresponds to your secondary nursing practice position.

Note: General rule 1, 3 & 4 applies here

Family Health is separated from Adult Health (General Rule: 4)

Neonatal is separated from Pediatrics (General Rule: 4)

Response Categories:

Acute care/Critical Care

Adult Health

Family Health

Anesthesia

Cardiology

Community

Geriatric/Gerontology

Home Health

Maternal-Child Health/Obstetrics

Medical Surgical

Nephrology

Occupational health

Other-**Non-clinical specialties** (Please specify)

Oncology

Palliative Care/Hospice

Pediatrics

Neonatal

Perioperative

Public Health

Psychiatric/Mental Health/Substance Abuse

Rehabilitation

School Health

Emergency/Trauma

Women's Health

Other-**Clinical specialties** (Please specify)

No Secondary Employment Specialty

- **Note from The Forum** The response options for these variables were derived from the response options to similar questions in HRSA's National Sample Survey of Registered Nurses. After discussion among work group members and Forum members who participated in the initial data summit, we felt that by collapsing some of the response options we would have a better opportunity of meeting our Minimum Data Set goals of capturing data that is already being collected instead of asking for an exhaustive and very detailed list of settings, positions, and specialties.